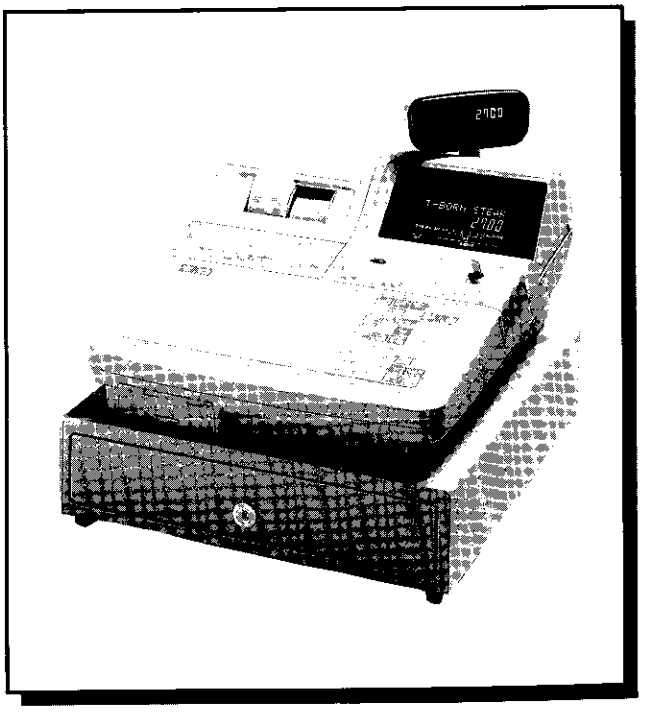
ELECTRONIC CASH REGISTER

TK-2300
TK-2700

OPERATION MANUAL



CASIO

Introduction

Congratulations on your selection of a CASIO Electronic Cash Register. Simplified operation is made possible by a specially designed keyboard layout and a wide selection of automated, programmable functions.

Important

- Location

  Locate the cash register on a flat, stable surface, away from heaters or areas exposed to direct sunlight, humidity or dust.

- Power cord

  The cash register operates on standard household current (120, 220, 230, 240V; 50/60Hz). Do not use an overloaded outlet.

- Cleaning

  Clean the cash register exterior with a soft cloth which has been moistened with a solution of a mild neutral detergent and water, and wrung out. Be sure that the cloth is thoroughly wrung out to avoid damage to the printer. Never use paint thinner, benzene, or other volatile solvents.

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1

Loading Receipt and Journal Paper

The same type of paper (45mm × 83mm i.d.) is used for receipts and the journal. Load the new paper before first operating the cash register or when red paper appears from the printer. Never operate the printer without paper. Doing so can damage the printer.
Open the printer cover using the printer cover key and proceed as outlined below.

1-1 Removing Paper Rolls

Use the following procedures to remove receipt and journal paper rolls. If you are loading paper for the first time, skip this section and read Loading Paper Rolls.

Receipt Paper

1. Tear the paper between the unused portion of the roll and the paper inlet (Fig. 1-1).
2. Remove the used roll.
3. Press the Receipt Feed key to remove the paper from the printer. Never pull the paper out by hand.

Journal Paper

1. Lift the take-up reel, tearing the paper between the reel and the journal outlet, if necessary.
2. Remove the used journal paper from the take–up reel.
3. Tear the paper between the unused portion of the roll and the paper inlet (Fig. 1-1).
4. Remove the used roll.
5. Press the Journal Feed key to remove the paper from the printer. Never pull the paper out by hand.

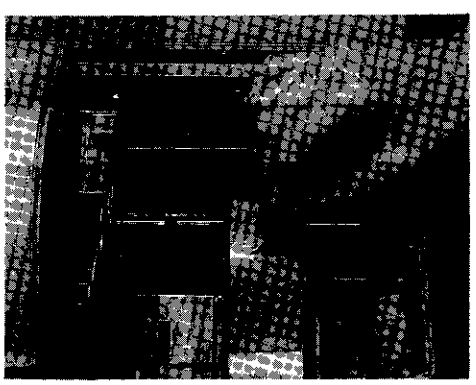


Fig 1-1.

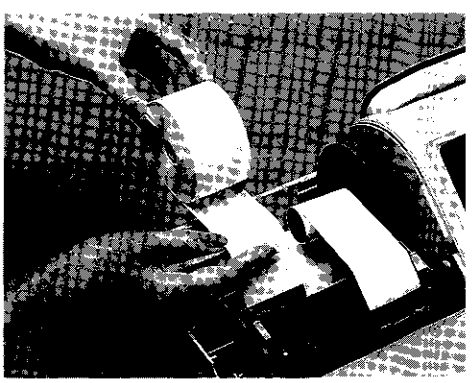


Fig 1-2.

Fig 1-3.

1-2 Loading Paper Rolls

Receipt Paper

1. Place the paper roll in its housing so that its leading edge can be pulled up from the bottom (Fig. 1-2).
2. Fold the end of the paper (Fig. 1-4) and insert the paper into the paper inlet (Fig. 1-3), and press the Receipt Feed key until approximately 20cm of paper are fed from the outlet.
3. Pass the leading edge of the paper through the paper outlet in the printer cover (Fig. 1-5), and close the cover.
4. Tear off the excess paper and make sure that it is feeding properly.

Journal Paper

1. Place the paper roll in its housing so that its leading edge can be pulled up from the bottom (Fig. 1-2).
2. Fold the end of the paper (Fig. 1-4) and insert the paper into the paper inlet (Fig. 1-6), and press the Journal Feed key until approximately 20cm of paper are fed from the outlet.
3. Lift the take-up reel, and insert the leading end of the paper into the slit in the take-up reel (Fig. 1-7). Wind the paper two or three turns onto the reel.
4. Replace the take-up reel and press the Journal Feed key to take up any slack in the paper. Confirm that the paper is feeding properly.

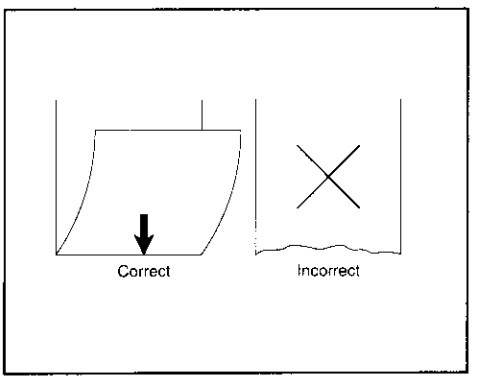
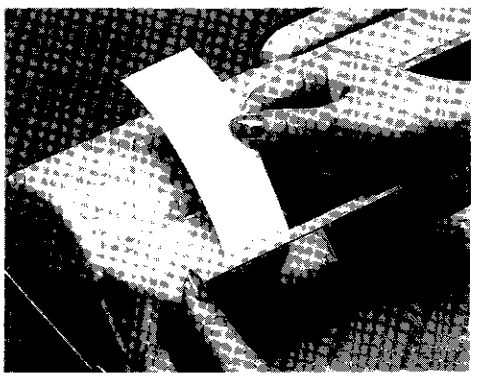


Fig 1-4.



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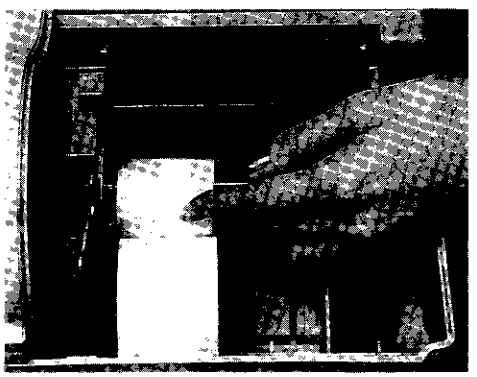


Fig 1-6.

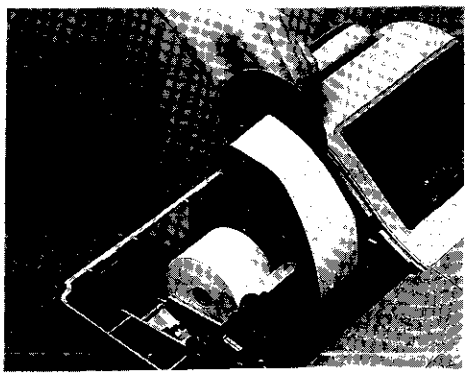


Fig 1-7.

2
Before Starting

You can register most normal transactions in the REG 1 mode. Use the REG 1 mode for all examples shown in this manual unless otherwise noted. Note also that you must identify a clerk by pressing a clerk button (not available in the United States or Canada) or inputting a clerk secret number before operating the cash register.
Note the following points that apply to the examples in this manual

- The prices or rates in parentheses in the tables that come at the beginning of each example are those programmed to keys.
- Examples are independent of each other. This means that though one example may show a unit price of $2.00 for Department 5, another example may show $10.00 for Department 5.
- Receipt examples shown in this manual are not actual size. Actual receipts are 45mm wide.
- Department keys, PLUs and function keys can be assigned an applicable mode, which limits the modes in which these keys can be operated.

Preset descriptors for items in receipt samples are specific for each example. This means that a descriptor for an item on one receipt sample may differ from the descriptor for the same item on a different receipt sample.

2-1 Long PLUs and Short PLUs

PLUs are available as Long PLUs and Short PLUs. The memory allocation operation (Programming Manual, Program 5 Mode) makes it possible to select from among simultaneous use of Long PLUs and Short PLUs, use of Long PLUs only, or use of Short PLUs only.

Short PLUs

The following describes programmability and functions of Short PLUs.

- Short PLUs can be preset with unit price for later automatic recall.
- Short PLUs are identified by sequential numbers.
- Short PLUs can be used as open PLUs.
- Short PLUs can be assigned 12-character or 16-character descriptors.
- Short PLUs are equipped with a sales amount totalizer and counter.

Long PLUs

In addition to the points described above for Short PLUs, the following programmability and functions are also available for Long PLUs.

- Long PLUs can be used as PLUs for set menu registration.
- Long PLUs can be used as PLUs for bottle link/return registration.
- An actual stock totalizer is available, so long PLUs can be used for control and monitoring of stock by programming a minimum stock value.
- Long PLUs can be preset with Random PLU codes up to 6 digits.

The following two methods are available for registration of Long PLUs.

- Registration using the Flat-Long PLU key.
- Registration using a PLU number or Random PLU code and the PLU key.

Regardless of the registration method used, the registration result is the same.

2-2 Errors

Anytime you make a mistake in operation, an error tone sounds and further operation becomes impossible in order to protect data. You can resume normal operation by pressing the Clear key.

2-3 Rechargeable Batteries

Your cash register features built-in rechargeable batteries that retain such information as program data, registration records, date, item and consecutive number for about 30 days on a full 24-hour charge.

2-4 Daily Register Operations

The following procedure shows common operations in the order they are usually performed.

Operation

1. Confirm that enough receipt and journal paper are present and load new paper rolls if necessary (page 2).
2. Read daily totals to confirm reset operation was performed for the previous day's totals (page 76).
3. Preset unit prices for department keys, PLUs and function keys if necessary (see Programming Manual).
4. Set the Mode Switch to REG 1 and identify a clerk using a clerk secret number (page 95).
5. Check the date and time set on the cash register (page 6).
6. Register the amount of the bank (page 34).
7. Register transactions.
   Normal sales (page 6)
   Received on account and paid out (page 27)
   Returns (page 28)
8. Register the pick up amount when the sentinel alarm sounds (page 28).
9. Perform read and reset operations as required, after counting the money in the cash drawer and registering the amount.
   Read daily sales totals (page 76).
   Read periodic sales totals (page 77).
   Reset daily sales totals (page 77).
   Reset periodic sales totals (page 77).
10. Remove the printed journal from the cash register (page 105).
11. Set the Mode switch to OFF and remove the key (page 95).
12. Empty the cash drawer and leave it open (page 109).
13. Carry the journal and cash to the office (page 109).

3

Basic Registrations

This section describes the fundamental registration procedures required by most applications.

3-1 Assigning a Clerk

On models available in the United States and Canada, clerk or cashier assignment can be performed using clerk secret numbers only (clerk buttons are not equipped). In other areas, you can assign clerks using clerk buttons or by using clerk secret numbers. The method you should use depends on the programming of your cash register.
Each clerk can be assigned two separate commission rates, and commissions are calculated automatically in accordance with the sales amount.

Clerk Button

You can assign the clerk or cashier using the four buttons located below the display panel.

Procedure

1. Insert the operator key into the Mode Switch.
2. Set the Mode Switch to the REG 1 position.
3. Press one of the clerk buttons.

Clerk Secret Number

When the cash register is programmed to use clerk secret numbers for clerk or cashier assignment, the clerk buttons are not functional.

Procedure—To sign on

1. Insert the operator key into the Mode Switch.
2. Set the Mode Switch to the REG 1 position.
3. If you don't want the clerk secret number you input to appear on the display, press the Clerk Number key before you input the clerk secret number.
4. Input up to four digits for the clerk secret number.
5. Press the Clerk Number key to register the clerk secret number.

Procedure—To sign off

1. Set the Mode Switch to the REG 1 position.
2. Input "0".
3. Press the Clerk Secret Number key to sign off.

- When you are using clerk secret numbers for clerk assignments, an Arrangement key that is assigned a clerk secret number and clerk secret number key operation (clerk sign on) is operational even if the clerk is signed off. See 45 for an explanation of the Arrangement key.
- If the Arrangement key does not include a clerk sign on procedure, pressing it while no clerk is signed on displays an error code to indicate that a clerk secret number was not input. This means that if you want the Arrangement key to be operational while no clerk is signed on, you must include the sign on procedure in the sequence assigned to the Arrangement key.
- The clerk sign on procedure assigned to the Arrangement key can be followed by other registration numbers. In such a case, pressing the Arrangement key automatically signs on the clerk (in accordance with the clerk number in the sign on procedure) and performs the subsequent registration operations.
- You will not be able to operate the cash register without using one of the two methods to assign a clerk or cashier.
- A clerk cannot sign on unless other clerks are signed off.
- The cash register can be programmed to automatically sign off the current clerk or cashier when a receipt is issued.
- The name or number of the currently assigned clerk is printed on the receipt and journal for each transaction.
- As long as no registration is in progress, setting the Mode Switch to the OFF position automatically signs off the clerk who is signed ON. Setting the Mode Switch to the OFF position while a registration is in progress does not sign the clerk off.

3-2 Displaying the Time and Date

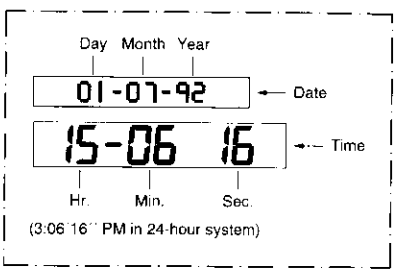
The time and date can be displayed on the cash register anytime it is not being used for registration. Only the Clear key can be used to clear time or date.

Operation

DATE/TIME X/DATE TIME X/FOR DATE TIME X/X4 DATE TIME ❶ C ❷

1. Press any one of these keys.
2. This is the only key you can use to clear the time and date from the display.

Display



You cannot use the Multiplication key to display the date or time when the input sequence PRICE × QUANTITY is programmed for the multiplication operation.

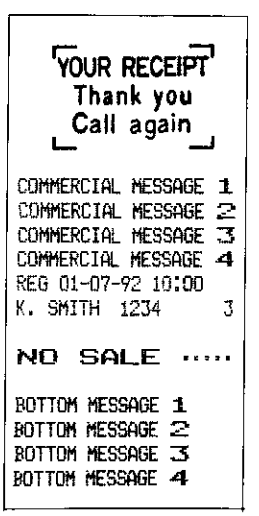
3-3 Making Change

Operation

NS or NS ❶

1. This operation opens the cash drawer. It cannot be used while a registration is in progress.

Receipt



3-4 Single Items and Cash Tenders

Department Items

Example

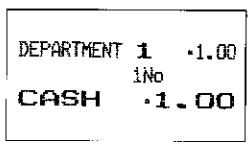
Tag		Qty	Tender	
DEPT 1	$1.00	1	Cash	$1.00

Operation

100 [DEPT 1]❶ [CA/AMT TEND]❷

1. If the price you are inputting matches the unit price programmed to the department key, you do not need to input a value here.
2. You don't have to input the amount tendered unless it is programmed as compulsory.

Receipt



When a subtotal is zero or less (negative value), input of the amount tendered is not compulsory, even if it is programmed as such.

Exceeding the Maximum Amount Limit

Example

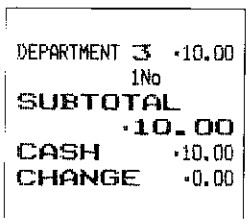
Tag		MAL	Qty	Tender	
DEPT 3	$10.00	$8.25	1	Cash	$10.00

Operation

1000 [DEPT 2]❶ ERROR ALARM [C]❷ [OPEN]❸
1000 [DEPT 3] 1000 [CA/AMT TEND]

1. This amount exceeds the maximum amount limit (MAL). The MAL restricts the size of the amount you can input, and it is programmable for each department key.
2. This key clears your last input and the error.
3. This key removes the MAL limitation for the next input.

Receipt



Exceeding the Low Digit Limit

Example

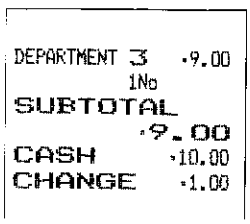
Tag		LDL	Qty	Tender	
DEPT 3	$9.00	3	1	Cash	$10.00

Operation

900 [DEPT 3]❶ ERROR ALARM [C]❷ [OPEN]❸
900 [DEPT 3] 1000 [CA/AMT TEND]

1. This amount exceeds the low digit limit (LDL). The LDL restricts the minimum number of digits you can input, and it is programmable.
2. This key clears your last input, and the error.
3. This key removes the LDL limitation for the next input.

Receipt



Flat–Long PLU Items

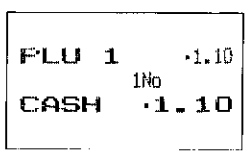
Example

Tag		Qty	Tender	
Flat-Long PLU 01 (Long PLU No. 1)	$1.10	1	Cash	$1.10

Operation

[01] [CA/AMT TEND]

Receipt



Flat–Long PLU Price Override

Example

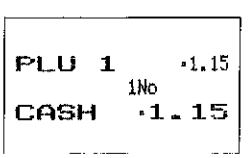
Tag		Qty	Tender	
Flat-Long PLU 01	$1.15	1	Cash	$1.15

Operation

115 [01]❶ [CA/AMT TEND]

1. Manually inputting a unit price here overrides the price preset for the Flat-Long PLU.

Receipt



PLU Items

Example

Tag		Qty	Tender	
PLU No. 14	($2.50)*	1	Cash	$2.50

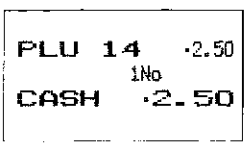
* Preset price

Operation

SHORT PLU
14 [SHORT PLU] [CA/AMT TEND]

LONG PLU
14 [PLU] [CA/AMT TEND]

Receipt



Sub-Department Items

Example

Tag		Qty	Tender	
SUB-DEPT 15	$6.00	1	Cash	$6.00

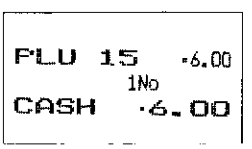
Operation

SHORT PLU
15 [SHORT PLU]❶ 600 [PRICE]❷ [CA/AMT TEND]

LONG PLU
15 [PLU]❶ 600 [PRICE]❷ [CA/AMT TEND]

1. These PLUs are programmed for use as sub-departments.
2. You must press the Price key to register the unit price for a sub-department. If the unit price is programmed to the sub-department you are registering, press the Price key without inputting anything. Here, the manually input price overrides any programmed price.

Receipt



Random PLU Code Items (Long PLU Only)

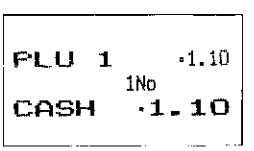
Example

Tag		Linked PLU No.	Qty	Tender	
PLU Code 123456	($1.10)	PLU No. 1	1	Cash	$1.10

Operation

LONG PLU
123456 [PLU] [CA/AMT TEND]

Receipt



3-5 Repeating Identical Items

Department Items

Example

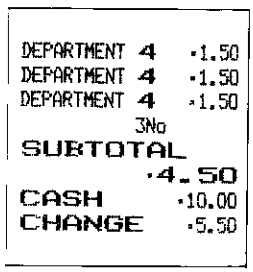
Tag		Qty	Tender	
DEPT 4	$1.50	3	Cash	$10.00

Operation

150 [DEPT 4] [DEPT 4]❶ [DEPT 4]❶ [SUB TOTAL]❷ 1000 [CA/AMT TEND]❸

1. Pressing the same department key repeats registration of the last unit price you input for that department.
2. This operation is optional, unless calculation of a subtotal is programmed as compulsory.
3. You don't have to input the amount tendered unless it is programmed as compulsory.

Receipt



Flat–Long PLU Items

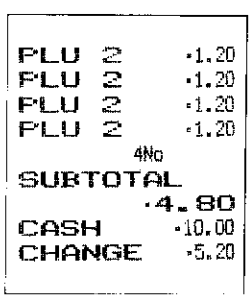
Example

Tag		Qty	Tender	
Flat-Long PLU 02	($1.20)	4	Cash	$10.00

Operation

[02] [02] [02] [02] 1000 [CA/AMT TEND]

Receipt



Flat–Long PLU Price Override

Example

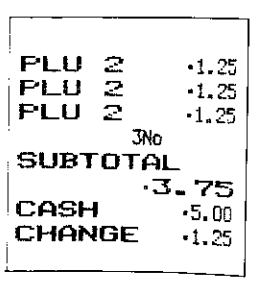
Tag		Qty	Tender	
Flat-Long PLU 02	($1.25)	3	Cash	$5.00

Operation

125 [02] [02]❶ [02]❶ 500 [CA/AMT TEND]

1. Pressing the same Flat-PLU key repeats registration of the last unit price you input for that Flat-PLU.

Receipt



PLU Items

Example

Tag		Qty	Tender	
PLU No. 2	($1.20)	3	Cash	$3.60

Operation

SHORT PLU

2 [SHORT PLU] [SHORT PLU]● [SHORT PLU]● [CA/AMT TEND]

LONG PLU

2 [PLU] [PLU]● [PLU]● [CA/AMT TEND]

1. Each press of the PLU or Short PLU key repeats registration of the last PLU you input using that key.

Receipt

```
PLU 2        ·1.20
PLU 2        ·1.20
PLU 2        ·1.20
      3No
CASH         ·3.60
```

Sub–Department Items

Example

Tag		Qty	Tender	
SUB-DEPT 15	($3.00)	3		
			Cash	$20.00
SUB-DEPT 15	$2.00	2		

Operation

SHORT PLU

15 [SHORT PLU] [PRICE] [PRICE] [PRICE] 15 [SHORT PLU]

200 [PRICE] [PRICE] [SUB TOTAL] 2000 [CA/AMT TEND]

LONG PLU

15 [PLU] [PRICE] [PRICE] [PRICE] 15 [PLU]

200 [PRICE] [PRICE] [SUB TOTAL] 2000 [CA/AMT TEND]

Receipt

```
PLU 15       ·3.00
PLU 15       ·3.00
PLU 15       ·3.00
PLU 15       ·2.00
PLU 15       ·2.00
      5No
SUBTOTAL
            ·13.00
CASH        ·20.00
CHANGE       ·7.00
```

Random PLU Code Items (Long PLUs Only)

Example

Tag		Linked PLU No.	Qty	Tender	
PLU Code 495634	($1.50)	PLU No. 5	4	Cash	$10.00

Operation

LONG PLU

495634 [PLU] [PLU]● [PLU]● [PLU] 1000 [CA/AMT TEND]

1. Pressing the PLU key repeats registration of the last random PLU code you input.

Receipt

```
PLU 5        ·1.50
PLU 5        ·1.50
PLU 5        ·1.50
PLU 5        ·1.50
      4No
SUBTOTAL
            ·6.00
CASH        ·10.00
CHANGE       ·4.00
```

3-6 Mixed Departments and PLUs

Example

Tag		Qty	Tender	
DEPT 3	($2.00)	6		
DEPT 4	$2.00	2		
PLU No. 4	($1.40)	1	Cash	$30.00
PLU No. 6	(— $0.50)	1		
SUB-DEPT 15	$3.00	2		

Operation

SHORT PLU

6 [DATE TIME]❶ [DEPT 3] 200 [DEPT 4] [DEPT 4]❷ 4 [SHORT PLU]
6 [SHORT PLU] 15 [SHORT PLU] 300 [PRICE] [PRICE]❷
3000 [CA/AMT TEND]

LONG PLU

6 [DATE TIME]❶ [DEPT 3] 200 [DEPT 4] [DEPT 4]❷ 4 [PLU]
6 [PLU] 15 [PLU] 300 [PRICE] [PRICE]❷
3000 [CA/AMT TEND]

1. You can input quantity with up to four digits to the left of the decimal.
2. Repeats

Receipt

```
   6 ITEMS
DEPARTMENT 3    *12.00
DEPARTMENT 4     *2.00
DEPARTMENT 4     *2.00
PLU 4            *1.40
PLU 6            -0.50
PLU 15           *3.00
PLU 15           *3.00
        12No
SUBTOTAL
        *22.90
CASH            *30.00
CHANGE           *7.10
```

3-7 Subtraction

Errors occur if the cash register is programmed to prohibit credit balances and the result produced by a calculation is negative.

Amount Reduction

Example 1

Tag		Reduction	Tender	
DEPT 1	$5.00	($0.25)	Cash	$10.25
DEPT 2	$6.00	$0.50		

Operation

500 [DEPT 1] [—]❶ 600 [DEPT 2] 50 [—]❷ [CA/AMT TEND]

1. This operation automatically subtracts the amount programmed to the Minus key.
2. A manually input amount overrides the programmed amount.

Receipt

```
DEPARTMENT 1     *5.00
SUBTRACTION      -0.25
DEPARTMENT 2     *6.00
SUBTRACTION      -0.50
        2No
CASH            *10.25
```

Example 2

Tag		Qty	Reduction	Tender	
DEPT 3	$5.00	4	($0.50) each	Cash	$20.00

Operation

4 [X/DATE TIME] 500 [DEPT 3] 4 [X/DATE TIME]❶ [−] 2000 [CA/AMT TEND]

1. You must also perform the multiplication operation for the amount being subtracted from each item.

Receipt

```
   4 ITEMS
DEPARTMENT 3    ·20.00
   4 ITEMS
SUBTRACTION      -2.00
         4No
SUBTOTAL
          ·18.00
CASH             ·20.00
CHANGE           ·2.00
```

The following operation becomes possible when the Minus key is programmed to allow credit balances.

Operation

4 [X/DATE TIME] [−] 4 [X/DATE TIME] 500 [DEPT 3] 2000 [CA/AMT TEND]

Discount for Item and Subtotal

Example

Tag		Discount	Subtotal Discount	Tender	
DEPT 1	$5.00	—	3%	Cash	$14.06
DEPT 2	$10.00	(5%)			

- On models available in the United States and Canada, you cannot perform the discount operation for subtotals (subtotal discount) immediately after operation of the Subtotal key. You can apply a discount a subtotal produced by the Merchandise Subtotal key only (merchandise subtotal discount). Be sure to use the Merchandise Subtotal key when you wish to discount a subtotal.
- On models available in other areas, you cannot perform the discount operation for subtotals (subtotal discount) immediately after operation of the Merchandise Subtotal key. Be sure to use the Subtotal key when you wish to discount a subtotal.
- Rounding is performed the same as for the premium operation, in accordance with the rate programmed for the Discount key. The value accumulated in the totalizers, shown on the display, and printed on the receipt/journal is the rounded result.
- The register can be programmed to produce an error whenever an attempt is made to perform the discount operation following operation of the Merchandise Subtotal key.

- The register can be programmed so that the discount operation can be performed following operation of the Merchandise Subtotal key only. In this case, attempting to perform the discount operation on the last registered item produces an error.

Operation

500 [DEPT 1] 1000 [DEPT 2] [%−]❶ [MD/ST]❷
3 [%−]❸ [CA/AMT TEND]

1. This operation applies the discount programmed to the Discount key to the last time you registered.
2. This operation calculates a subtotal for application of a discount.
3. The value you input overrides the value programmed to the Discount key.

Receipt

```
DEPARTMENT 1      *5.00
DEPARTMENT 2     *10.00
5%
DISCOUNT         -0.50
SUBTOTAL
                 *14.50
3%
DISCOUNT         -0.44
          2No
CASH            *14.06
```

3-8 Multiplication

In all of the following examples, the method used for rounding multiplication results is programmable.

Department Items

You can program one of the three following sequences for multiplication operations involving department items.

- Quantity × Price
- Unit Price × Quantity
- Quantity Extension

Note that the following examples cover multiplication with department items, and do not apply to PLU or sub-department items.

Example 1 — Quantity × Price

Tag		Qty	Tender	
DEPT 1	$1.00	12	Cash	$20.00

Operation

12 [X/DATE TIME]❶ 100 [DEPT] [SUB TOTAL]❷ 2000 [CA/AMT TEND]

1. The value you input for the quantity can have up to four digits to the left of the decimal point and up to two digits to the right of the decimal point.
2. This operation is optional unless it is programmed as compulsory.

Receipt

```
  12 ITEMS
DEPARTMENT 1    *12.00
        12No
SUBTOTAL
                *12.00
CASH            *20.00
CHANGE           *8.00
```

Example 2 — Unit Price × Quantity

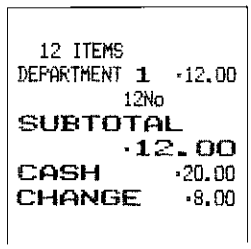
Tag		Qty	Tender	
DEPT 1	$1.00	12	Cash	$20.00

Operation

100 [X/DATE TIME]❶ 12 [DEPT]❷ [SUB TOTAL]❸ 2000 [CA/AMT TEND]

1. You cannot use the [X/FOR DATE TIME] or [X/XX DATE TIME] key for this operation.
2. The value you input for the quantity can have up to four digits to the left of the decimal point and up to two digits to the right of the decimal point.
3. This operation is optional unless it is programmed as compulsory.

Receipt



Example 3 — Quantity Extension

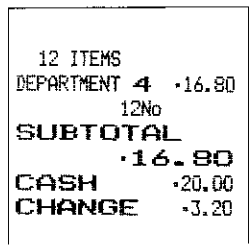
Tag		Qty	Tender	
DEPT 4	($1.40)	12	Cash	$20.00

In this example, the department key is programmed with the quantity extension function, so a quantity can be input directly without pressing the Multiplication key. This registration performs multiplication using the unit price programmed to the department key. Attempting to perform this registration using a department key that is not programmed with a unit price results in an error.

Operation

12 [DEPT 4] 2000 [CA/AMT TEND]

Receipt



Flat-Long PLU Items

Example 1

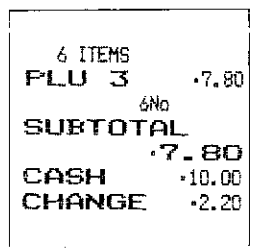
Tag		Qty	Tender	
Flat-Long PLU 03	($1.30)	6	Cash	$10.00

Operation

6 [X/DATE TIME]❶ [03] 1000 [CA/AMT TEND]

1. The value you input for the quantity can have up to four digits to the left of the decimal point and up to two digits to the right of the decimal point.

Receipt



Example 2

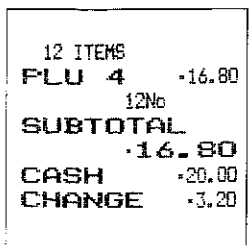
Tag		Qty	Tender	
Flat-Long PLU 04	($1.40)	12	Cash	$20.00

In this example, the Flat-Long PLU key is programmed with the quantity extension function, so a quantity can be input directly without pressing the Multiplication key.

Operation

12 [04] 2000 [CA/AMT TEND]

Receipt



PLU Items

Example

Tag		Qty	Tender	
PLU No. 2	($1.20)	15	Cash	$20.00

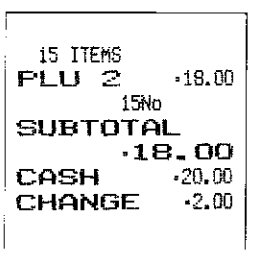
Operation

SHORT PLU
15 [DATE TIME] 2 [SHORT PLU] 2000 [CA/AMT TEND]

LONG PLU
15 [DATE TIME] 2 [PLU] 2000 [CA/AMT TEND]

1. The value you input for the quantity can have up to four digits to the left of the decimal point and up to two digits to the right of the decimal point.

Receipt



Sub-Department Items

Example

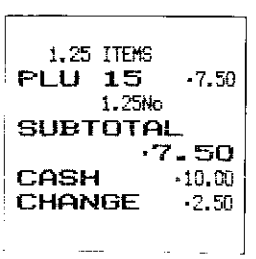
Tag		Qty	Tender	
SUB-DEPT 15	$6.00	1.25	Cash	$10.00

Operation

SHORT PLU
1.25 [DATE TIME] 15 [SHORT PLU] 600 [PRICE] 1000 [CA/AMT TEND]

LONG PLU
1.25 [DATE TIME] 15 [PLU] 600 [PRICE] 1000 [CA/AMT TEND]

Receipt



Random PLU Code Items (Long PLUs Only)

Example

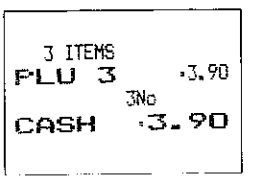
Tag		Linked PLU No.	Qty	Tender	
PLU Code 352667	($1.30)	PLU No. 3	3	Cash	$3.90

Operation

LONG PLU
3 [X/DATE TIME]● 352667 [PLU] [CA/AMT TEND]

1. The value you input for the quantity can have up to four digits to the left of the decimal point and up to two digits to the right of the decimal point.

Receipt



Split Sales of Packaged Items

The following methods are available for registrations of split sales of packaged items.

- Method 1
  Registration without the package price and package quantity programmed to department keys and PLUs.
- Method 2
  Registration with the package price and package quantity programmed to department keys and PLUs.

Method 1

Example

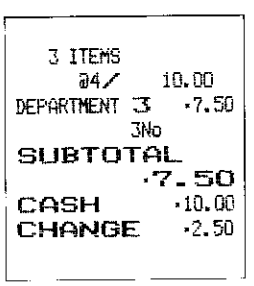
Tag		Qty	Tender	
DEPT 3	4 FOR $10.00	3	Cash	$10.00

Operation

3 [X/FOR DATE TIME]● 4 [X/FOR DATE TIME]● 1000 [DEPT 3]● 1000 [CA/AMT TEND]

1. The value you input for the quantity can have up to four digts to the left of the decimal point and up to two digits to the right of the decimal point.
2. The total amount contained in the package.
3. Package price.

Receipt



Method 2

Example

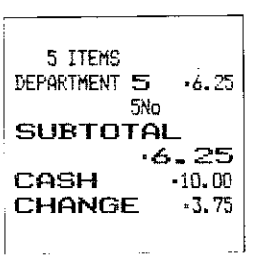
Tag	Package Qty	Package Price	Sales Qty	Tender	
DEPT 5	12	$15.00	5	Cash	$10.00

Operation

5 [DEPT 5] 1000 [CA/AMT TEND]●

1. The value you input for the quantity can have up to four digits to the left of the decimal point and up to two digits to the right of the decimal point.

Receipt



Measurement Extension for Sub-Department Item

Example

Tag		Measurement	Tender	
SUB-DEPT 15	$10.00/m^2	3m × 2m	Cash	$60.00

Operation

SHORT PLU
3 [X/DATE TIME]❶ 2 [X/DATE TIME]❷ 15 [SHORT PLU]
1000 [PRICE]❸ [CA/AMT TEND]

LONG PLU
3 [X/DATE TIME]❶ 2 [X/DATE TIME]❷ 15 [PLU]
1000 [PRICE]❸ [CA/AMT TEND]

1. The value you input for the length (or width) can have up to four digits to the left of the decimal point and up to three digits to the right of the decimal point.
2. Other dimension. This value can be an integer up to four digits long.
3. Unit price (for one square meter in this case).

Receipt

```
   3 ITEMS
   2 ITEMS      @10.00
PLU 15          ·60.00
              6No
CASH           ·60.00
```

Measurement Extension for Random PLU Code Item (Long PLUs Only)

Example

Tag	Linked PLU Number		Measurement	Tender	
PLU Code 231792	PLU 0008	($3.00/m^2)	1.5 × 4m	Cash	$20.00

Operation

LONG PLU
1.5 [X/DATE TIME]❶ 4 [X/DATE TIME]❷ 231792 [PLU] 2000 [CA/AMT TEND]

1. The value you input for the length (or width) can have up to four digits to the left of the decimal point and up to three digits to the right of the decimal point.
2. Other dimension. This value can be an integer up to four digits long.

Receipt

```
   1.5 ITEMS
   4 ITEMS      @3.00
PLU 8           ·18.00
              6No
SUBTOTAL
               ·18.00
CASH           ·20.00
CHANGE          ·2.00
```

3-9 Taxable Transactions

Tax Table 1 and Tax Table 2

Example

Tag		Taxable Status
DEPT 1	$1.00	Taxable Status 1
DEPT 2	$2.00	Taxable Status 2
DEPT 3	$3.00	Taxable Status 1

Operation

100 [DEPT 1] 200 [DEPT 2]
300 [DEPT 3]❶ [TAX/ST]❷ [TAX/ST]❸ [CA/AMT TEND]

1. This operation is optional unless it is programmed as compulsory.
2. This operation displays the subtotal of the Taxable Status 1 Amount.
3. This operation displays the subtotal of the Taxable Status 2 Amount.

Receipt

```
DEPARTMENT 1    T
                $1.00
DEPARTMENT 2    T
                $2.00
DEPARTMENT 3    T
                $3.00
          3No
TAXABLE AMOUNT 1$4.00
TAX 1           $0.20
TAXABLE AMOINT 2$2.00
TAX 2           $0.09
CASH           $6.29
```

Manual Tax and Tax Shift

The following procedure applies in the United States and Canada only.

Example

Tag		Taxable Status
DEPT 4	$4.00	Taxable Status 2 + Tax $0.20
DEPT 5	$5.00	Taxable Status 2
DEPT 6	$6.00	Taxable Status 1 + Taxable Status 2
DEPT 7	$7.00	Taxable Status 2→Non-Taxable

Operation

400 [DEPT 4] 20 [TAX]❶ 500 [DEPT 5] [T1/S2]❷
600 [DEPT 6] [T1/S2]❸ 700 [DEPT 7] [CA/AMT TEND]

1. This taxable amount you input can be up to seven digits long.
2. This operation specifies that Taxable Status 2 should be added to the next item.
3. This operation specifies that Taxable Status 2 should be removed from the next item.

Receipt

```
DEPARTMENT 4T   $4.00
MANUAL TAX      $0.20
DEPARTMENT 5T   $5.00
DEPARTMENT 6T   $6.00
DEPARTMENT 7    $7.00
          4No
TAXABLE 1       $6.00
TAX 1           $0.36
TAXABLE 2      $15.00
TAX 2           $1.05
CASH           $23.61
```

Rate Tax

The following procedure applies in areas other than United States and Canada.

Example

Tag		Taxable Status	Tax Rate
DEPT 1	$1.00	Taxable Status 1	
DEPT 2	$2.00	Taxable Status 1	10%
DEPT 3	$3.00	Taxable Status 1	

Operation

100 [DEPT 1] 200 [DEPT 2] 300 [DEPT 3] [SUB TOTAL]
10 [R-TAX] ❶ [CA/AMT TEND]

1. This operation is optional unless it is programmed as compulsory.
2. A manually input value overrides a rate programmed to the Rate Tax key. You cannot skip this input if it is programmed as compulsory.

Receipt

```
DEPARTMENT 1   T1
                ·1.00
DEPARTMENT 2   T1
                ·2.00
DEPARTMENT 3   T1
                ·3.00
TAX             ·0.60
            3No
CASH          ·6.60
```

VAT Calculations

Example 1

Tag		Taxable Status
DEPT 1	$3.00	VAT 3 Taxable
DEPT 3	$4.50	VAT 1 Taxable → VAT 1 Non-Taxable
DEPT 5	$5.00	VAT 1 & 2 Taxable → VAT 1 & 2 Non-Taxable
DEPT 7	$6.50	VAT 1 & 2 Taxable

Operation

200 [DEPT 1] [T/S1] 350 [DEPT 3] 500 [DEPT 5] [CA/AMT TEND]

Receipt

```
DEPARTMENT 1   T1
                ·2.00
DEPARTMENT 3    ·3.50
DEPARTMENT 5   T1
                ·5.00
            3No
TAXABLE AMOUNT 1·6.36
TAX 1           ·0.64
CASH          ·10.50
```

You should use the following procedure when VAT 1, VAT 2, and VAT 3 are used in combination

Example 2

Tag		Taxable Status
DEPT 1	$3.00	VAT 3 Taxable
DEPT 3	$4.50	VAT 1 Taxable → VAT 1 Non-Taxable
DEPT 5	$5.00	VAT 1 & 2 Taxable → VAT 1 & 2 Non-Taxable
DEPT 7	$6.50	VAT 1 & 2 Taxable

Operation

300 [DEPT 1] [T1 S1] 450 [DEPT 3] [T1 S1] [T1 S2]
500 [DEPT 5] 650 [DEPT 7] [CA/AMT TEND]

Receipt

```
DEPARTMENT 1    T3
                •3.00
DEPARTMENT 3    •4.50
DEPARTMENT 5    •5.00
DEPARTMENT 7    •6.50
          4No
TAXABLE AMOUNT 1•5.91
TAX 1           •0.59
TAXABLE AMOUNT 2•6.19
TAX 2           •0.31
TAXABLE AMOUNT 3•2.91
TAX 3           •0.09
CASH          •19.00
```

Tax Exemption

The Tax Exempt key can be programmed to exempt any taxable amount. The following procedure applies in the United States and Canada only.

Example 1

Tag		Taxable Status
DEPT 1	$1.00	Taxable Status 1 exempt
DEPT 2	$2.00	Taxable Status 2
DEPT 3	$3.00	Taxable Status 1 exempt
DEPT 4	$4.00	Taxable Status 2

In this example, the Tax Exempt key is programmed for exemption of Taxable Status 1 only.

Operation

100 [DEPT 1] 200 [DEPT 2] 300 [DEPT 3]
400 [DEPT 4] [TX/EX][1] [CA/AMT TEND]

1. This operation exempts Taxable Status 1 items.

Receipt

```
DEPARTMENT 1    T
                $1.00
DEPARTMENT 2    T
                $2.00
DEPARTMENT 3    T
                $3.00
DEPARTMENT 4    T
                $4.00
TAX EXEMPT      -----
          4No
TAXABLE AMOINT 2$6.00
TAX 2           $0.27
CASH $10.27
```

Example 2

Tag		Taxable Status
DEPT 5	$5.00	Taxable Status 2 exempt
DEPT 6	$6.00	Taxable Status 1 exempt
DEPT 7	$7.00	Taxable Status 2 exempt
DEPT 8	$8.00	Taxable Status 1 exempt

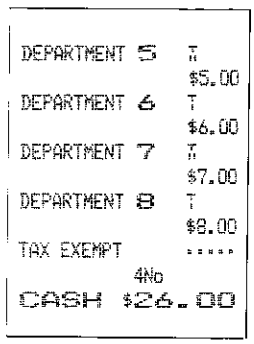
In this example, the Tax Exempt key is programmed for exemption of Taxable Status 1 and Taxable Status 2.

Operation

500 [DEPT 5] 600 [DEPT 6] 700 [DEPT 7]
800 [DEPT 8] [TX/EX]❶ [CA/AMT TEND]

1. This operation exempts Taxable Status 1 items and Taxable Status 2 items.

Receipt



3-10 Other Payment Media

Check Payments

Example

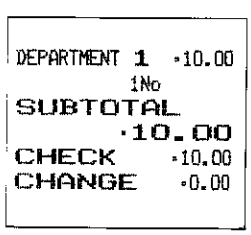
Tag		Tender	
DEPT 1	$10.00	Check	$10.00

Operation

1000 [DEPT 1] 1000 [CHK/TEND]❶

1. Skip this input if the register is programmed to prohibit check amount inputs.

Receipt



You must perform the following operation when check endorsement is programmed as compulsory. If you don't the next operation you try will cause an error in the next input.

1. Insert the check into the optional slip printer.
2. Press the Check Endorsement key to print the check endorsement.
3. Remove the check from the slip printer after it is released.

The Check Print key can be used to print the amount, date, and check print message on the check.

1. Insert the check into the optional slip printer.
2. Press the Check Print key to print the check endorsement.
3. Remove the check from the slip printer after it is released.

Cashing Checks

You can program Check Tender key to automatically apply a rate or fixed amount as a service charge. Then, when you press the key, the amount due the customer is printed on the receipt and displayed.

Example 1 — Rate

Tender		Preset Rate
Check	$10.00	(10%)

Operation

1000 [CHK/TEND]❶

1. Input the amount of the check. The cash register uses the programmed rate to calculate the service charge, which is deducted from the amount of the check. The result is shown on the display and printed.

Receipt

```
CHECK          10.00
SERVICE CHARGE -1.00
CASH CHANGE     9.00
```

Example 2 — Amount

Tender		Preset Amount
Check	$10.00	($0.25)

Operation

1000 [CHK/TEND]❶

1. Input the amount of the check. The cash register deducts the fixed service charge from the amount of the check. The result is shown on the display and printed.

Receipt

```
CHECK          10.00
SERVICE CHARGE -1.00
CASH CHANGE     9.00
```

Charge Tender

Example

Tag		Tender	
DEPT 5	$15.00	Charge	$15.00

Operation

1500 [DEPT 5] 1234567890 [#]❶ [CH]❷

1. This operation prints a reference number that can be up to ten digits long. You can skip this operation, but management often requires some type of customer identification for charge sales.
2. This operation registers the last input as a charge tender. You should also input an amount tendered here if such input is programmed as compulsory.

Receipt

```
DEPARTMENT 5   15.00
NUMBER
        1234567890
        1No
CHARGE
       15.00
```

You must perform the following operation if validation of charge tenders is compulsory.

Operation

Insert Slip [VALID]❶

1. When validation slip printing is programmed as compulsory, an error occurs if you skip this step.

Credit Card Tender

Example

Tag		Tender	
DEPT 4	$25.00	Credit card	$25.00

Operation

2500 [DEPT 4] 1212121212 [#]❶ [CREDIT]❷

1. This operation prints a reference number that can be up to ten digits long. You can skip this operation, but management often requires some type of customer identification for credit card sales.
2. This operation registers the last input as a credit tender. You should also input an amount tendered here if such input is programmed as compulsory.

Receipt

```
DEPARTMENT 4      ·25.00
NUMBER
          1212121212
          1No
CREDIT
         ·25.00
```

You must perform the following operation if validation of credit tenders is compulsory.

Operation

Insert Slip [VALID]❶

1. When validation slip printing is programmed as compulsory, an error occurs if you skip this step.

Mixed Tender

Example 1

Tag		Tender	
		Charge	$20.00
DEPT 5	$55.00	Check	$30.00
		Cash	$5.00

Operation

5500 [DEPT 5] 2000 [CH] 3000 [CHK/TEND] [CA/AMT TEND]

Receipt

```
DEPARTMENT 5      ·55.00
          1No
SUBTOTAL
         ·55.00
CHARGE    ·20.00
CHECK     ·30.00
CASH       ·5.00
```

The same transaction would be registered as shown below when operation of the Charge key is programmed as prohibited for an amount tendered input.

Operation

5500 [DEPT 5] 3000 [CHK/TEND] 500 [CA/AMT TEND] [CH]

Example 2

Tag		Tender			
		Media	Monetary Unit	Qty	Total
DEPT 1	$53.00	Check	$15.00 checks	3	$45.00
		Cash	$5.00 notes	2	$10.00

Operation

5300 [DEPT 1] 3 [X/DATE TIME]❶ 1500 [CHK/TEND]❷ 2 [X/DATE TIME]❸ 500 [CA/AMT TEND]❹

1. This operation inputs the number of checks.
2. Be sure to input the amount of each check and not the total amount here. An error occurs if the total amount exceeds 10 digits.
3. This operation inputs the number of notes.
4. Be sure to input the amount of each note and not the total amount here.

Receipt

```
DEPARTMENT 1      ·53.00
          1No
SUBTOTAL
          ·53.00
CHECK             ·45.00
CASH              ·10.00
CHANGE            ·2.00
```

3-11 Switching Between REG 1 and REG 2

In the following example, the cash register is programmed so you can't perform discounts in the Reg 1 Mode, with discounts in the Reg 2 Mode.

Example

Tag		Discount	Tender
PLU No. 46 (Flat-Long PLU 46)	($5.00)	—	
PLU No. 45	($45.00)	10% (REG 2)	$55.00
DEPT 1	$10.00	—	

Operation

SHORT PLU

46 [SHORT PLU] 45 [SHORT PLU] REG 2 10 [%−] REG 1 1000 [DEPT 1] [CA/AMT TEND]

LONG PLU

[46] 45 [PLU] REG 2 10 [%−] REG 1 1000 [DEPT 1] [CA/AMT TEND]

Receipt

```
PLU 46            ·5.00
PLU 45            ·45.00
10%
DISCOUNT          -4.50
DEPARTMENT 1      ·10.00
          3No
CASH              ·55.50
```

3-12 Corrections

Correction of Last Item Registered

Operation

100 [DEPT 1] 200 [DEPT 2] [DEPT 2]❶ [ERR CORR]❷ [CA/AMT TEND]

1. Error
2. Voids the last item registered.

Receipt

```
DEPARTMENT 1      *1.00
DEPARTMENT 2      *2.00
DEPARTMENT 2      *2.00
ERROR CORRECT     -2.00
          2No
CASH              *3.00
```

Correction of a Specific Item

Operation

100 [DEPT 1] 200 [DEPT 2]❶ 300 [DEPT 3]
400 [DEPT 4] [VOID]❷ 200 [DEPT 2]❸ [CA/AMT TEND]

1. Error
2. Indicates that the next operation is a void operation.
3. Repeat the operation that you want to void.

Receipt

```
DEPARTMENT 1      *1.00
DEPARTMENT 2      *2.00
DEPARTMENT 3      *3.00
DEPARTMENT 4      *4.00
VOID              *****
DEPARTMENT 2      -2.00
          3No
CASH              *8.00
```

The Void key can be used to to correct registrations made with a department key, Long PLU, or Short PLU only.

Cancellation of All Items Registered

The following procedure cancels all items registered in a transaction. However, the number of items you can cancel with this procedure is limited, depending on the memory allocation operation. If you try to cancel a transaction that is larger that this limit, an error occurs and you will not be able to continue. Only items contained in the current transaction are canceled, without affecting preceding transactions.

Example

Operation

100 [DEPT 1] 200 [DEPT 2] 300 [DEPT 3]
400 [DEPT 4] [ERR CORR]❶

1. Press this key to clear all items registered.

Receipt

```
DEPARTMENT 1      *1.00
DEPARTMENT 2      *2.00
DEPARTMENT 3      *3.00
DEPARTMENT 4      *4.00
CANCEL            *****
```

3-13 Validation Slip Printing

Tag		Reduction	Tender	
PLU No. 39 (Flat-Long PLU 39)	($0.00)			
PLU No. 40 (Flat-Long PLU 40)	($1.00)	$0.10	Cash	$0.90

Example

In this example, validations are required for the PLU 39 registration, reductions and subtotals.

Operation

SHORT PLU
39 [SHORT PLU] Insert Slip [VALID] 40 [SHORT PLU] 10 [−] Insert Slip [VALID] [SUB TOTAL]
Insert Slip [VALID] [CA/AMT TEND]

LONG PLU
[39] Insert Slip [VALID] [40] 10 [−] Insert Slip [VALID] [SUB TOTAL]
Insert Slip [VALID] [CA/AMT TEND]

```
REG0107921215M. J234   118PLU 39        ·0.00
REG0107921215M. J234   118SUBTRACTION   -0.10
REG0107921215M. J234   118SUB TOTAL     ·0.90
```

3-14 Non-Sales Transactions

Received on Account

You cannot perform the following operation during registration of a transaction.

Example

Amount	Compulsory
$700.00	Validation

Operation

70000 [RC]

Receipt

```
RCVED ON ACCOUNT
              ·700.00
```

The following operation is required if compulsory validation is programmed.

Operation

[VALID]

Paid Outs

Example

Amount	Applicable Mode
$1.50	REG 2

Operation

REG 2 1212121212 [#] 150 [PO]

Receipt

```
PAID OUT      1.50
```

Pick Ups

The sentinel alarm function can also be programmed with an amount to signal for a pick up when the contents of the drawer exceed a preset amount.

Example

Media	Monetary Unit	Qty
Cash	$100.00 notes	5
	$10.00 notes	2
Check	$15.00 check	1

Operation

5 [DATE TIME] 10000 [PICK UP] 2 [DATE TIME]
1000 [PICK UP] [SUB TOTAL] [CA/AMT TEND] 1500 [PICK UP] [CHK/TEND]

Receipt

```
  5 ITEMS
PICK UP      500.00
  2 ITEMS
PICK UP       20.00
CASH         520.00
```

```
PICK UP       15.00
CHECK         15.00
```

3-15 Refunds

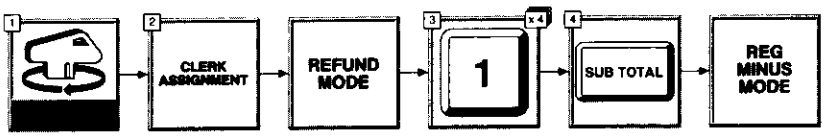
Using the RF Mode

When the Mode Switch of the register is in the RF position, you can access either the Refund Mode or Reg Minus Mode. Programming determines whether the register goes into the Reg Minus Mode or the Refund Mode the first time the Mode Switch is set to the RF position. Totalizers and counters in each mode are affected as shown in the following table.

Totalizer/Counter	REFUND Mode	REG Minus Mode
Net sales amount	Reduced	Reduced
Amount	Reduced	Reduced
Number of items	Reduced	Reduced
Count	Increased	Reduced
Net sales number of customers	Increased	Reduced
Number of customers	Reduced	Reduced
Stock quantity	Programmable*	Increased

* Programmable as either "not calculated" or "increased".

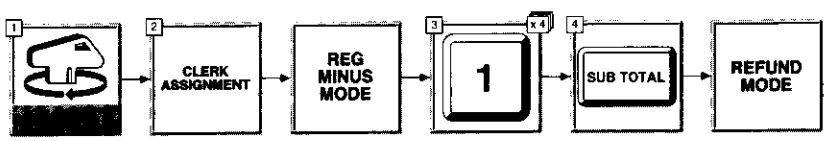
To change from the Refund Mode to the Reg Minus Mode



1. Set the Mode Switch to the RF position.
2. Sign on a clerk by pressing a clerk button or inputting a clerk secret number. At this point, the register enters the Refund Mode.
3. Input "1111".
4. Press the Subtotal key to enter the Reg Minus Mode. At this point, the printer prints a mode change symbol on the receipt and journal.

While the register is in the Reg Minus Mode, the symbol is printed on receipts and the journal for registrations performed while the Mode Switch is in the RF position. The symbol is also printed in the validation/slip header line.

To change from the Reg Minus Mode to the Refund Mode



1. Set the Mode Switch to the RF position.
2. Sign on a clerk by pressing a clerk button or inputting a clerk secret number. At this point, the register enters the Reg Minus Mode.
3. Input "1111".
4. Press the Subtotal key to enter the Refund Mode. At this point, the printer prints a mode change symbol on the receipt and journal.

While the register is in the Refund Mode, the symbol is printed on receipts and the journal for registrations performed while the Mode Switch is in the RF position.

Reg Minus Mode

Normal Refund Transaction

Example

Returned Goods		Qty	Payment	
DEPT 1	$1.50	2	Cash	$10.20
PLU No. 2	($1.20)	6		

Operation

SHORT PLU
150 [DEPT 1] [DEPT 1] 6 [X/DATE TIME] 2 [SHORT PLU] [CA/AMT TEND]

LONG PLU
150 [DEPT 1] [DEPT 1] 6 [X/DATE TIME] 2 [PLU] [CA/AMT TEND]

Receipt

```
R—01-07-92 11:29
M. JACKSON1234      91

DEPARTMENT 1     ·1.50
DEPARTMENT 1     ·1.50
  6 ITEMS
PLU 2            ·7.20
          BNo
CASH            ·10.20
```

Subtraction and Discounts

Example

Returned Goods		Action		Payment	
DEPT 3	$4.00	Subtraction	$0.15	Cash	$4.99
PLU No. 2	($1.20)	Discount	(5%)		

Operation

SHORT PLU
400 [DEPT 3] 15 [−] 2 [SHORT PLU] [%−] [CA/AMT TEND]

LONG PLU
400 [DEPT 3] 15 [−] 2 [PLU] [%−] [CA/AMT TEND]

Receipt

```
R--01-07-92 11:29
M. JACKSON1234      92

DEPARTMENT 3      *4.00
SUBTRACTION       -0.15
PLU 2             *1.20
5%
DISCOUNT-0.06
          2No
CASH              *4.99
```

Refund Mode

Normal Refund Transaction

Example

Returned Goods		Qty	Payment	
DEPT 1	$1.50	2	Cash	$10.20
PLU No. 2	($1.20)	6		

Operation

SHORT PLU
150 [DEPT 1] [DEPT 1] 6 [X/DATE TIME] 2 [SHORT PLU] [CA/AMT TEND]

LONG PLU
150 [DEPT 1] [DEPT 1] 6 [X/DATE TIME] 2 [PLU] [CA/AMT TEND]

Receipt

```
R--01-07-92 11:29
M. JACKSON1234      91

DEPARTMENT 1      *1.50
DEPARTMENT 1      *1.50
   6 ITEMS
PLU 2             *7.20
          8No
CASH             *10.20
```

Subtraction and Discounts

Example

Returned Goods		Action		Payment	
DEPT 3	$4.00	Subtraction	$0.15	Cash	$4.99
PLU No. 2	($1.20)	Discount	(5%)		

Operation

SHORT PLU
400 [DEPT 3] 15 [−] 2 [SHORT PLU] [%−] [CA/AMT TEND]

LONG PLU
400 [DEPT 1] 15 [−] 2 [PLU] [%−] [CA/AMT TEND]

Receipt

```
R--01-07-92 11:29
M. JACKSON1234      92

DEPARTMENT 3      *4.00
SUBTRACTION       -0.15
PLU 2             *1.20
5%
DISCOUNT-0.06
          2No
CASH              *4.99
```

Refunds in the Reg 1 and Reg 2 Modes

You can also process refunds in the Reg 1 and Reg 2 Modes.

Example

Tag		Return or Cancel		Payment
DEPT 1	$2.35	DEPT 1	$2.35	
DEPT 2	$2.00			Cash $2.00
PLU No. 2	($1.20)	PLU No. 2	($1.20)	

Operation

SHORT PLU

235 [DEPT 1] 200 [DEPT 2] 2 [SHORT PLU] [RF]

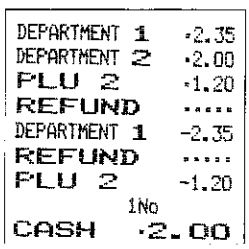
235 [DEPT 1] [RF] 2 [SHORT PLU] [CA/AMT TEND]

LONG PLU

235 [DEPT 1] 200 [DEPT 2] 2 [PLU] [RF]

235 [DEPT 1] [RF] 2 [PLU] [CA/AMT TEND]

Receipt



4

Advanced Registration Functions

The functions described here are for more specialized applications and can be used as needed.

4-1 Stock Check Operation

Each Long PLU has an actual stock totalizer that you can program with a minimum stock quantity. Then the register checks actual stock quantities against the programmed minimum stock quantities. Stock operations are performed only for Long PLUs programmed with minimum stock quantities.

Stock Warning Indicators

The cash register checks for negative values in actual stock quantities during the registration itself. After registration is complete, it checks actual stock quantities against minimum stock quantities. The following warning indicators are used to inform the operator of any problems.

- " -STOCK" displayed during registration

  This message indicates that the actual stock quantity is negative. You can also program the cash register to treat this condition as an error. This warning does not appear when actual stock quantity is zero.
- "MIN.STOCK" displayed and buzzer sounds after registration

  This message indicates that the actual stock quantity is less than or equal to the minimum stock quantity. The cash register can be programmed so that a buzzer sounds when the actual stock quantity is less than the minimum stock quantity.

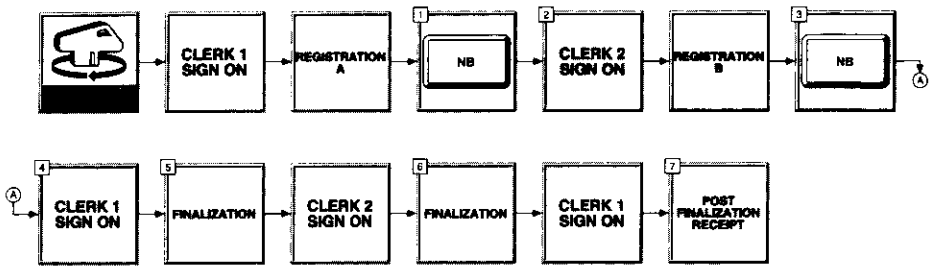
Notes

- The stock check operation is also performed for Long PLUs programmed with minimum stock quantities that make up set menus.
- None of the warning indicators appear unless the cash register is specifically programmed for the stock check operation.
- Stock operations can be performed for registrations in the RF Mode or those performed with the Refund key.
- An error correct, void, or cancel operation restores the original number of items in stock value.

4-2 Clerk (Cashier) Interrupt Function

In the REG 1, REG 2, and RF modes, clerks can change while a transaction is in progress, making it possible for multiple clerks to simultaneously perform registrations using a single register. For example, if Clerk A is interrupted while registering a transaction, Clerk B can use the same machine to register a different transaction. Then Clerk A can continue the original registration from the point where it was interrupted.

Procedure



1. The clerk for Registration A is signed off when the New Balance key is pressed. This step cannot be omitted when the register is programmed for hold compulsory.
2. When a clerk signs on in the clerk interrupt function, a header is printed on the journal, indicating the date, time, clerk descriptor, and the store/machine number.
3. The clerk for Registration B is signed off when the New Balance key is pressed. This step cannot be omitted when the register is programmed for hold compulsory.
4. When a clerk signs on again, the clerk's descriptor and memory number are printed on the journal.
5. Finalization for Registration A (Clerk 1). Note that it is not necessary to press the New Balance key here.
6. Finalization for Registration B (Clerk 2). Note that it is not necessary to press the New Balance key here.
7. Issuance of post-finalization receipt for Registration A (Clerk 1).

Notes

- The operations possible after the New Balance key is pressed are: numeric input, Clear key, Clerk Secret Number key, and switch operations. Attempting any other key operation generates an error, causing the message "CLK## " to appear on the display.
- Following operation of the New Balance key, the only mode changes allowed are between REG 1, REG 2, and RF.
- When the register is programmed for clerk or cashier assignment using clerk buttons, you can assign the clerk or cashier using buttons.
- When the register is programmed for clerk or cashier assignment using clerk secret numbers, you can use the Clerk Secret Number key to input secret numbers.
- The validation print operation can be performed following a clerk change.
- A guest receipt can be issued following clerk change, and receipts can be issued separately for each clerk.
- In the above example, a cancel operation can be performed during registration by either of the clerks. When Clerk A signs back on (after being interrupted by Clerk B), the cancel operation cancels only the items registered after signing back on. Items registered before the interrupt are not canceled.

4-3 Registering Loan Amounts

Use this procedure to register loan or bank received from the office before operation.

Example

Unit	Qty	Media	
$1.00 notes	10	Cash	$35.00
$5.00 notes	5		

Operation

10 [K/DATE TIME] 100 [LOAN] 5 [K/DATE TIME]
500 [LOAN] [SUB TOTAL] [CA/AMT TEND]

Receipt

```
  10 ITEMS
LOAN          ·10.00
   5 ITEMS
LOAN          ·25.00
CASH          ·35.00
```

Use the following keys to finalize the above operations according to loan media.

[CA/AMT TEND], [CHK/TEND], [CH], [CREDIT], [FS/TEND], [EBT/TEND]

The amount you finalize is added to the appropriate media in drawer totalizer.

4-4 Single Item Cash Sales

A department key or PLU programmed with single item sale status finalizes the transaction as soon as it is registered.

The single item sales function cannot be programmed if the keyboard does not include a Cash Amount Tendered key. The single item sales function can only be used for cash sales.

Example 1

Tag		Sales Status	Qty	Tender	
DEPT 6	$2.00	S.I.S.	1	Cash	$2.00

Operation

200 [DEPT 6]

1. The transaction is immediately finalized.

Receipt

```
DEPARTMENT 6    ·2.00
          1No
CASH          ·2.00
```

Example 2

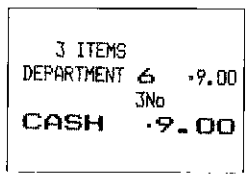
Tag		Sales Status	Qty	Tender	
DEPT 6	($3.00)	S.I.S.	3	Cash	$9.00

Operation

3 [DATE/TIME] [DEPT 6]❶

1. The unit price programmed to the department key is registered and the registration is finalized.

Receipt



Example 3

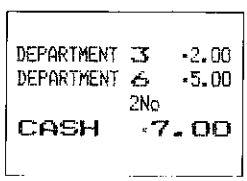
Tag		Sales Status	Qty	Tender	
DEPT 3	$2.00	Normal	1		
DEPT 6	$5.00	S.I.S.	1	Cash	$7.00

Operation

200 [DEPT 3] 500 [DEPT 6]❶ [CA/AMT/TEND]

1. The transaction is not finalized here, because the single item sales department was registered following another item.

Receipt



4-5 Shifting Menus (TK-2300)

Example

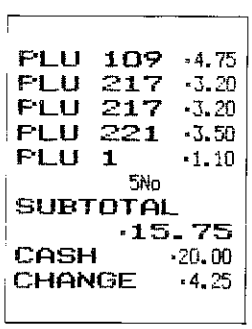
Tag		Qty	Tender	
Flat-Long PLU 109	($4.75)	1		
Flat-Long PLU 217	($3.20)	2		
Flat-Long PLU 221	($3.50)	1	Cash	$20.00
Flat-Long PLU 01	($1.10)	1		

Operation

[2ND]❶ [01]❷ [3RD]❸ [01]❹ [01]❺ [3RD]❻
[05]❻ [01]❼ 2000 [CA/AMT/TEND]

1. Shifts to the 2nd menu.
2. Flat-Long PLU 109 (on 2nd menu).
3. Shifts to the 3rd menu.
4. Flat-Long PLU 217 (on 3rd menu).
5. Repeat
6. Flat-Long PLU 221 (on 3rd menu).
7. Flat-long PLU 01 (on 1st menu). The menu automatically shifts back to the 1st menu as soon as a registration is performed on the 2nd or 3rd menu.

Receipt



- The above example assumes that the following Flat-Long PLU numbers are assigned to each menu.

1st menu : 01 to 108
2nd menu : 109 to 216
3rd menu : 217 to 324

- Menu shift can be programmed to be maintained after each Flat-Long PLU operation or switched back to the 1st menu after each operation.
- If your cash register is programmed so that menu shift is not maintained, the 2nd or 3rd menu key must be pressed before each new input, but not before repeated input of the same Flat-Long PLU.
- The initial menu (immediately after you switch power on) is always the 1st menu.
- The procedure shown above is performed assuming that the cash register is programmed not to maintain menu shift. If menu shift is programmed, the procedure is as follows:

Operation

[2ND]❶ [01]❷ [3RD]❸ [01]❹ [01]❺ [05]❻ [1ST]❼ [01] 2000 [CA/AMT TEND]

1. Shifts to the 2nd menu.
2. Flat-Long PLU 109 (on 2nd menu).
3. Shifts to the 3rd menu.
4. Flat-Long PLU 217 (on 3rd menu).
5. Repeat
6. Flat-Long PLU 221 (on 3rd menu).
7. Shifts to the 1st menu.

4-6 Shifting Menus (TK-2700)

Example

Tag		Qty	Tender	
Flat-Long PLU 109	($4.75)	1		
Flat-Long PLU 217	($3.20)	2		
Flat-Long PLU 221	($3.50)	1	Cash	$20.00
Flat-Long PLU 01	($1.10)	1		

Operation

[2ND]❶ [03]❷ [3RD]❸ [05]❹ [05]❺ [3RD]❻
[09]❼ [01]❽ 2000 [CA/AMT TEND]

1. Shifts to the 2nd menu.
2. Flat-Long PLU 109 (on 2nd menu).
3. Shifts to the 3rd menu.
4. Flat-Long PLU 217 (on 3rd menu).
5. Repeat
6. Flat-Long PLU 221 (on 3rd menu).
7. Flat-long PLU 01 (on 1st menu). The menu automatically shifts back to the 1st menu as soon as a registration is performed on the 2nd or 3rd menu.

Receipt

```
PLU 109      *4.75
PLU 217      *3.20
PLU 217      *3.20
PLU 221      *3.50
PLU 1        *1.10
        5No
SUBTOTAL
          *15.75
CASH        *20.00
CHANGE       *4.25
```

- The above example assumes that the following Flat-Long PLU numbers are assigned to each menu.

1st menu : 01 to 106
2nd menu : 107 to 212
3rd menu : 213 to 318

- Menu shift can be programmed to be maintained after each Flat-Long PLU operation or switched back to the 1st menu after each operation.
- If your cash register is programmed so that menu shift is not maintained, the 2nd or 3rd menu key must be pressed before each new input, but not before repeated input of the same Flat-Long PLU.
- The initial menu (immediately after you switch power on) is always the 1st menu.
- The procedure shown above is performed assuming that the cash register is programmed not to maintain menu shift. If menu shift is programmed, the procedure is as follows:

Operation

[2ND]❶ [03]❷ [3RD]❸ [05]❹ [05]❺ [09]❻ [1ST]❼ [01] 2000 [CA/AMT TEND]

1. Shifts to the 2nd menu.
2. Flat-Long PLU 109 (on 2nd menu).
3. Shifts to the 3rd menu.
4. Flat-Long PLU 217 (on 3rd menu).
5. Repeat
6. Flat-Long PLU 221 (on 3rd menu).
7. Shifts to the 1st menu.

4-7 Addition

Additional Charge *Example 1*

Tag		Addition	Tender	
DEPT 1	$5.00	($0.50)		
DEPT 2	$7.00	($0.75)	Cash	$20.00

Operation

500 [DEPT 1] [+]❶ 700 [DEPT 2] 75 [+]❶
2000 [CA/AMT TEND]

1. This operation input the amount programmed to the key.
2. Manually inputting an amount overrides the programmed amount.

Receipt

```
DEPARTMENT 1      ·5.00
ADDITION         ·0.50
DEPARTMENT 2      ·7.00
ADDITION         ·0.75
        2No
SUBTOTAL
          ·13.25
CASH             ·20.00
CHANGE            ·6.75
```

Example 2

Tag		Qty	Addition	Tender	
DEPT 4	$3.00	3	$0.25 each	Cash	$24.45

Operation

SHORT PLU

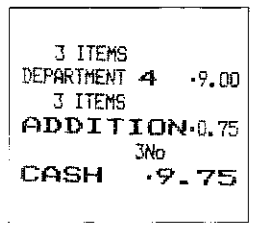
3 [X/DATE TIME] 300 [DEPT 4] 3 [X/DATE TIME]① 25 [+] [CA/AMT TEND]

LONG PLU

3 [X/DATE TIME] 300 [DEPT 4] 3 [X/DATE TIME]① 25 [+] [CA/AMT TEND]

1. You must also perform the multiplication operation for the amount being added to each item.

Receipt



Premium for Item and Subtotal

Example

Tag		Premium	Subtotal Premium	Tender	
DEPT 5	$10.00	7%	(5%)	Cash	$20.00
DEPT 6	$5.00	—			

- On models available in the United States and Canada, you cannot perform the premium operation for subtotals (subtotal premium) immediately after operation of the Subtotal key. You can apply a premium to a subtotal produced by the Merchandise Subtotal key only (merchandise subtotal premium). Be sure to use the Merchandise Subtotal key when you wish to apply a premium to a subtotal.
- On models available in other areas, you cannot perform the premium operation for subtotals (subtotal premium) immediately after operation of the Merchandise Subtotal key. You can apply a premium to a subtotal produced by the Subtotal key only. Be sure to use the Subtotal key when you wish to apply a premium to a subtotal.
- The premium operation for the last item registered cannot be performed when the cash register is programmed for gross totalizing of departments and PLUs. One of the following rounding methods can be specified for the premium operation in accordance with the rate programmed for the Premium key.

Final Digit	Rounding
0 to 2	0
3 to 7	5
8 or 9	10

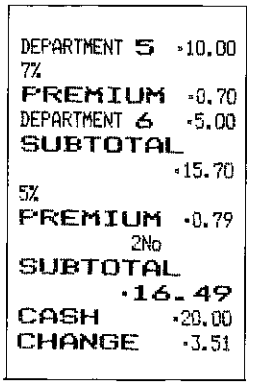
The value accumulated in the totalizers, shown on the display, and printed on the receipt/journal is the rounded result.

- The register can be programmed so that attempts to perform the premium operation following operation of the Merchandise Subtotal key result in an error.
- The register can be programmed so that the premium operation can be performed following operation of the Merchandise Subtotal key only. In this case, attempts to perform the premium operation on the last registered item result in an error.

Operation

1000 [DEPT 5] 7 [%+] 500 [DEPT 6] [RA/ST] [%+]
2000 [CA/AMT TEND]

Receipt



4-8 Coupon Transactions

Coupon Registration Using the Coupon Key

Note that errors result when the result of a calculation is negative if the cash register is programmed to prohibit credit balances.

Example: Cash register programmed for gross totalizing of departments and PLUs

Tag		Qty	Coupon		Tender	
			Amount	Qty		
PLU No. 32	($12.00)	2	$1.50	2		
DEPT 2	$8.00	1	$0.50 (preset)	1	Cash	$28.50

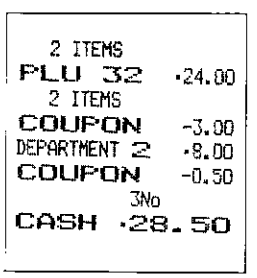
Operation

SHORT PLU
2 [X/DATE TIME]❶ 32 [SHORT PLU] 2 [X/DATE TIME] 150 [CPN]❷
800 [DEPT 2] [CPN]❸ [CA/AMT TEND]

LONG PLU
2 [X/DATE TIME]❶ 32 [PLU] 2 [X/DATE TIME] 150 [CPN]❷
800 [DEPT 2] [CPN]❸ [CA/AMT TEND]

1. The value you input for the quantity can have up to four digits to the left of the decimal point and up to two digits to the right of the decimal point.
2. The coupon amount can be up to seven digits long.
3. Just press the Coupon key without inputting a value when the coupon price being registered matches that programmed to the key.

Receipt



Example: Cash register programmed for net totalizing of departments and PLUs

Tag		Qty	Coupon Amount	Coupon Qty	Tender
PLU No. 20	($15.00)	2	$2.00 (preset)	2	
DEPT 1	$10.00	1	$1.00	1	Cash $40.00

Operation

SHORT PLU

2 [X/DATE TIME]❶ 20 [SHORT PLU] 1000 [DEPT 1] [SUB TOTAL]❷ [CPN]❸
[CPN] 100 [CPN] 4000 [CA/AMT TEND]

LONG PLU

2 [X/DATE TIME]❶ 20 [PLU] 1000 [DEPT 1] [SUB TOTAL]❷ [CPN]❷
[CPN] 100 [CPN] 4000 [CA/AMT TEND]

1. The value you input for the quantity can have up to four digits to the left of the decimal point and up to two digits to the right of the decimal point.
2. Calculate the subtotal. You cannot skip this step when the register is programmed for net totalizing of departments and PLUs.
3. Just press the Coupon key without inputting a value when the coupon price being registered matches that programmed to the key.

Receipt

```
   2 ITEMS
PLU 20          ·30.00
DEPARTMENT 1    ·10.00
COUPON          -2.00
COUPON          -2.00
COUPON          -1.00
        3No
SUBTOTAL
        ·35.00
CASH            ·40.00
CHANGE          ·5.00
```

Coupon Registration Using the Coupon 2 Key

Example

Tag		Qty	Coupon Amount	Coupon Qty	Tender
DEPT 3	$14.00	1	$1.00	1	
PLU No. 18		1	$0.50 (preset to PLU No. 51)	1	Cash $20.00

Operation

SHORT PLU

1400 [DEPT 3] [CPN 2]❶ 100 [DEPT 3] 18 [SHORT PLU] [CPN 2]
51 [SHORT PLU]❷ 2000 [CA/AMT TEND]

LONG PLU

1400 [DEPT 3] [CPN 2]❶ 100 [DEPT 3] 18 [PLU] [CPN 2]
51 [PLU]❷ 2000 [CA/AMT TEND]

1. This specifies that the next input is a coupon. Press this key before each coupon input.
2. The coupon that is programmed to the PLU number that you input is looked up automatically.

Recept

```
DEPARTMENT 3    ·14.00
COUPON 2·····
DEPARTMENT 3    -1.00
PLU 18          ·7.00
COUPON 2·····
PLU 51          -0.50
        2No
SUBTOTAL
        ·19.50
CASH            ·20.00
CHANGE          ·0.50
```

4-9 Registering the Second Unit Price

Second unit prices along with quantity modifiers can be programmed to Long PLUs. Pressing the 2nd Unit Price free function key calls up the second unit price, quantity modifier, and descriptor for the next registered Long PLU. Totalizers and inventory are adjusted by multiplying the number of items being registered by the quantity modifier programmed to the Long PLU being registered.

- The 2nd Unit Price key must be pressed before each registration of a Long PLU whose second unit price and quantity modifier are to be used.
- Second unit price registration is not available with sub-departments when second unit price is not preset.
- Second unit prices and quantity modifiers are assigned to Long PLUs using programming procedures described in the Programming Manual.
- Even if a Long PLU is programmed with a package quantity, the second unit price and quantity modifier are applied during registration following operation of the 2nd Unit Price key.

Example 1

Tag	Quantity Modifier	Qty	Tender	
Long-PLU 1 ($5.00) *1	(0.5) *2	1	Cash	$7.00
Long-PLU 2 ($2.00) *1	(3) *2	1		

*1 Preset second unit price.
*2 Preset quantity modifier.

Operation

[2nd●]❶ 1 [PLU] [2nd●]❶ 2 [PLU] 700 [CA/AMT TEND]

1. This operation declares that the next input is a second unit price.

Receipt

```
PLU 1 (2nd)    ·5.00
PLU 2 (2nd)    ·2.00
          2No
SUBTOTAL
              ·7.00
CASH           ·7.00
CHANGE         ·0.00
```

Example 2

Tag	Quantity Modifier	Qty	Tender	
Long PLU 7 ($1.00) *1	(2.0) *2	3	Cash	$10.00

*1 Preset second unit price.
*2 Preset quantity modifier.

Operation

LONG PLU
3 [DATE TIME]❶ [2nd●]❷ 7 [PLU] 1000 [CA/AMT TEND]

1. The value you can input for the quantity can have up to four digits to the left of the decimal place and up to three digits to the right
2. This operation declares that the next input is a second unit price.

Receipt

```
      3 ITEMS
PLU 7 (2nd)    ·3.00
          3No
SUBTOTAL
              ·3.00
CASH          ·10.00
CHANGE         ·7.00
```

4-10 Preset Tender Amounts

An amount up to six digits long can be programmed to the Cash Amount Tendered key. Then, when that key is pressed without inputting a value, the programmed value is automatically registered and the transaction is finalized. When an amount is programmed to the Cash Amount Tendered key, attempting to manually input an amount results in an error.

Example 1

Tag		Qty	Tender	
DEPT 1	$8.00	1	Cash	($10.00)*

* Preset amount

Operation

800 [DEPT 1] [CA/AMT TEND]

Receipt

```
DEPARTMENT 1      ·8.00
          1No
SUBTOTAL         ·8.00
CASH            ·10.00
CHANGE           ·2.00
```

Example 2

Tag		Qty	Tender	
DEPT 4	$15.00	1	Check	($5.00)
		1	Cash	($10.00)*

* Preset amount

Operation

1500 [DEPT 4] 500 [CHK/TEND] [CA/AMT TEND]

Receipt

```
DEPARTMENT 4     ·15.00
          1No
SUBTOTAL
                ·15.00
CHECK            ·5.00
CASH            ·10.00
CHANGE           ·0.00
```

4-11 Bottle Link Operation (Long PLU Only)

You can link any type of PLU (Short, Long, Flat-Long) or sub-department to a Long PLU or Flat-Long PLU.

Example

Tag		Qty	Linked PLU No.		Tender	
			PLU No.	Unit Price		
PLU No. 36	($3.25)	1	PLU No. 11	$0.25		
Flat-Long PLU 22	($3.50)	3	PLU No. 37	$0.35	Cash	$24.05
SUB-DEPT 17	$4.00	2	PLU No. 38	$0.50		

Operation

LONG PLU
36 [PLU] 3 [%/DATE TIME] [22] 17 [PLU]
400 [PRICE] [PRICE] [CA/AMT TEND]

Receipt

```
PLU 36      *3.25
PLU 11      *0.25
  3 ITEMS
PLU 22     *10.50
PLU 37      *1.05
PLU 17      *4.00
PLU 38      *0.50
PLU 17      *4.00
PLU 38      *0.50
          6No
CASH      *24.05
```

4-12 Bottle Returns

Linked Bottle Return Key (Long PLU Only)

You can use the Linked Bottle Return key to register a bottle return. A Long PLU, Flat-Long PLU, or sub-department whose programmed unit price represents the contents of the bottle, can be linked with any type of PLU (Short, Long, Flat-Long) or sub-department whose programmed unit price represents the deposit on the bottle. In the following example, the Bottle Return key has been programmed to operate as a linked bottle return key.

Example

Bottle Return				Payment
Bottle Link Item	Qty	Linked PLU No.	Unit Price	
PLU No. 36 ($3.25)	1	PLU No. 11	$0.25	
Flat-Long PLU 22 ($3.50)	1	PLU No. 37	$0.35	Cash $2.10
SUB-DEPT 17 $4.00	3	PLU No. 38	$0.50	

Operation

LONG PLU

[LINKED BR] 36 [PLU] [LINKED BR] [22] [LINKED BR] 3 [X/DATE TIME]
17 [PLU] [PRICE] [CA/AMT TEND]

Receipt

```
LINKED BOTTLE RN·····
PLU 36
PLU 11          -0.25
LINKED BOTTLE RN·····
PLU 22
PLU 37          -0.35
LINKED BOTTLE RN·····
  3 ITEMS
PLU 17
PLU 38          -1.50
          0No
CASH           -2.10
```

The Linked Bottle Return key must be pressed before input of each new linked bottle return.

Bottle Return Key

In this operation, the Bottle Return key has been programmed to operate as a bottle return key.

Example 1

Tag		Bottle Return	Tender	
DEPT 2	$3.00	($0.25)		
DEPT 3	$4.00	$0.50	Cash	$6.25

Operation

300 [DEPT 2] [BR] 400 [DEPT 3] 50 [BR] [CA/AMT TEND]

Receipt

```
DEPARTMENT 2    ·3.00
BOTTLE RETURN   -0.25
DEPARTMENT 3    ·4.00
BOTTLE RETURN   -0.50
          2No
CASH           ·6.25
```

Example 2

Tag		Qty	Bottle Return		Tender	
			Amount	Qty		
DEPT 4	$6.00	3	$0.75	4	Cash	$20.00

Operation

SHORT PLU
3 [X/DATE TIME] 600 [DEPT 4] 4 [X/DATE TIME] 75 [BR]
2000 [CA/AMT TEND]

LONG PLU
3[X/DATE TIME] 600 [DEPT 4] 4 [X/DATE TIME] 75 [BR]
2000 [CA/AMT TEND]

Receipt

```
   3 ITEMS
DEPARTMENT 4    ·18.00
   4 ITEMS
BOTTLE RETURN    -3.00
        3No
SUBTOTAL
          ·15.00
CASH      ·20.00
CHANGE     ·5.00
```

4-13 Arrangement Key Registrations

Up to 10 key operations can be assigned to an Arrangement key. Then, simply pressing the Arrangement key performs all of the key functions assigned to it.

Up to 10 key operations can also be assigned to an address code. Then, when you input the address code using the Arrangement key, all of the key functions assigned to the address code are performed.

Example 1

Tag		Tender	
DEPT 1	($1.00)	Cash	$4.00
PLU No. 9	($1.50)		
PLU No. 10	($2.00)		
Reduction	(— $0.50)		

Operation

[ARG]

Receipt

```
DEPARTMENT 1    ·1.00
PLU 9           ·1.50
PLU 10          ·2.00
SUBTRACTION     -0.50
        3No
CASH      ·4.00
```

Example 2

Address	Tag		Tender	
1	DEPT 1	($1.10)	Cash	$25.60
	DEPT 2	($10.00)		
	Discount (% —)	(5%)		
	DEPT 4	($15.00)		

Operation

1 [ANS]

Receipt

```
DEPARTMENT 1    ·1.10
DEPARTMENT 2   ·10.00
5%
DISCOUNT       -0.50
DEPARTMENT 4   ·15.00
                3No
CASH          ·25.60
```

4-14 Set Menus

Set Menus Using PLU Numbers (Long PLUs Only)

Example

Set Menu		Set Menu Items	Qty	Tender	
		PLU No. 1			
PLU No. 35	($5.00)	PLU No. 3	1	Cash	$5.00
		PLU No. 12			

Operation

35 [PLU] [CA/AMT TEND]

1. All PLU items that are assigned to Long PLU 35 (the menu item) are registered.

Receipt

```
PLU 35        ·5.00
 PLU 1
 PLU 3
 PLU 12
          1No
CASH         ·5.00
```

- When you register a set menu, its total amount is added to the PLU totalizer and counter. The price of each set menu item is also added to each respective PLU totalizer and counter.

Set Menus Using Flat-Long PLU Keys

Example

Set Menu		Set Menu Items	Qty	Tender	
(Long PLU No.16) Flat-Long PLU 16	($10.00)	PLU No. 14 PLU No. 5 PLU No. 23	1	Cash	$10.00

Operation

16 ❶ [CA/AMT TEND]

Receipt

```
PLU 16        ·10.00
PLU 14
PLU 5
PLU 23
        1No
CASH        ·10.00
```

All PLU items that are assigned to Long PLU 35 (the menu item) are registered.

4-15 Tips

Example

Tag		Qty	Tip	Tender	
DEPT 1	$3.00	1	$0.50	Cash	$10.00
DEPT 3	$5.00	1			

Operation

300 [DEPT 1] 500 [DEPT 3] [SUB TOTAL] 50 [TIP] [SUB TOTAL]
1000 [CA/AMT TEND]

Receipt

```
DEPARTMENT 1    ·3.00
DEPARTMENT 3    ·5.00
TIP             ·0.50
        2No
SUBTOTAL
            ·8.50
CASH           ·10.00
CHANGE          ·1.50
```

4-16 Inputting the Number of Customers

Example 1

Tag		Qty	Number of Customers	Tender	
DEPT 2	$15.00	1	2	Cash	$20.00
DEPT 4	$5.00	1			

Operation

2 [CUSTOMER] 1500 [DEPT 2] 500 [DEPT 4] [CA/AMT TEND]

Receipt

```
    2No. OF CUSTO
DEPARTMENT 2   ·15.00
DEPARTMENT 4    ·5.00
         2No
CASH          ·20.00
```

Example 2

You can only use the following operation to re-input the number of customers when the Customer key is preset to allow re-input. When programming prohibits re-input of the number of customers, this operation causes an error.

Operation

3 [CUSTOMER] 1500 [DEPT 2] 500 [DEPT 4] 2 [CUSTOMER] [CA/AMT TEND]

Receipt

```
    3No. OF CUSTO
DEPARTMENT 2   ·15.00
DEPARTMENT 4    ·5.00
    5No. OF CUSTO
         2No
CASH          ·20.00
```

You can re-input the number of customers either immediately after the initial input or during later registration.

Example 3

You can use the following operation to add customers to an original number of customers input (when addition to the number of customers is allowed).

Operation

2 [CUSTOMER] 1500 [DEPT 2] 500 [DEPT 4] 1 [CUSTOMER] [CA/AMT TEND]

Receipt

```
    2No. OF CUSTO
DEPARTMENT 2   ·15.00
DEPARTMENT 4    ·5.00
    3No. OF CUSTO
         2No
CASH          ·20.00
```

4-17 Multiple Item Totaling Function

This function accumulates all items registered from the first item registered up to point that the Tray Total key is pressed, or all items between two presses of the Tray Total key. Pressing the Tray Total key displays the total amount with the tax included and prints it on the receipt and journal (printing on receipt and journal is programmable).

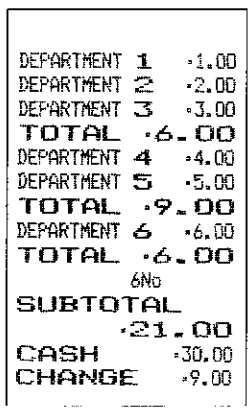
Example

Customer	Tag		Qty	Tender	
A	DEPT 1	$1.00	1		
	DEPT 2	$2.00	1		
	DEPT 3	$3.00	1	Cash	$30.00
B	DEPT 4	$4.00	1		
	DEPT 5	$5.00	1		
C	DEPT 6	$6.00	1		

Operation

100 [DEPT 1] 200 [DEPT 2] 300 [DEPT 3] [TRAY TOTAL]
400 [DEPT 4] 500 [DEPT 5] [TRAY TOTAL]
600 [DEPT 6] [TRAY TOTAL] [SUB TOTAL] 3000 [CA/AMT TEND]

Receipt



Finalized transactions cannot be included in the total produced by the Tray Total Key.

4-18 Text Recall Function

This procedure is used to recall text by inputting the address where the text is stored. The recalled text is printed on the receipt and journal.

Example

Tag		Qty	Tender	
DEPT 1	$46.00	1		
			Cash	$56.00
DEPT 4	$10.00	1		

Recalled Text

Address	Programmed Text
1	MEDIUM SIZE (all characters double size)
20	SMALL SIZE (all characters double size)

Operation

4600 [DEPT 1] 1 [TEXT RECALL] 1000 [DEPT 4]
20 [TEXT RECALL] [CA/AMT TEND]

Receipt

```
DEPARTMENT 1  ·46.00
MEDIUM SIZE
DEPARTMENT 4  ·10.00
SMALL SIZE
        2ND
CASH  ·56.00
```

If you input an address where no text is stored, the register locks and the error tone sounds.

4-19 Foreign Currency Registration

The currency exchange function prints the foreign currency amount on the receipt and journal in the following cases.

- When converting from a foreign currency to local currency
- When tender is made in a foreign currency
- When a subtotal is converted to a foreign currency

There are three sets of in-drawer totals for cash-in-drawer and checks-in-drawer.

- Cash-in-drawer 1/Check-in-drawer 1
- Cash-in-drawer 2/Check-in-drawer 2
- Cash-in-drawer 3/Check-in-drawer 3

Each Currency Exchange key can be linked to a set of in-drawer totals. The decimal place position and the monetary symbol following the currency exchange operation can be specified for each Currency Exchange key. When the in-drawer total amounts are printed on reports, however, they are reported in the local currency, according to the number of decimal places, and using the monetary symbol for the local currency.

The TK-2300 lets you program which drawer opens when a Currency Exchange key is pressed. When a transaction is paid for using the local currency only, the drawer assigned to the clerk registering the transaction opens. When a transaction is paid for using a foreign currency only, the drawer programmed to the Currency Exchange key that is pressed opens. When a transaction is paid for using a mixture of local and foreign currency, or when currency exchange is requested, two drawers open: the one assigned to the clerk registering the transaction, and the drawer programmed to the Currency Exchange key that is pressed.

Conversion of a foreign currency to the local currency

Example

Convert ¥5,000 (Japanese yen) cash to dollars.
Preprogrammed exchange rate: $1.00/¥144 = 0.69444

Operation

[CE] 5500 [CA/AMT TEND]

Receipt

```
CURRENCY EXCHANG
CASH          ¥5000
CHANGE        -34.72
```

* Use the following keys to finalize according to payment media.
[CA/AMT TEND], [CHK/TEND], [CH], [CREDIT]

Partial amount tender in a foreign currency

Example

Tag		Qty	Tender	
DEPT 5	$15.00	1	Cash (Japanese yen) ¥5,000	
DEPT 6	$25.00	1	Check (U. S. dollars)	$5.28

Preprogrammed exchange rate: $1.00/¥144 = 0.69444

Operation

1000 [DEPT 5] 2500 [DEPT 6] [SUB TOTAL] [CE]
5000 [CA/AMT TEND] [CHK/TEND]

Receipt

```
DEPARTMENT 5    -15.00
DEPARTMENT 6    -25.00
          2NO
SUBTOTAL
              -40.00
CURRENCY EXCHANG
CASH          ¥5000
CASH          -34.72
CHECK          -5.28
```

Full amount tender in a foreign currency

Example

Tag		Qty	Tender	
DEPT 3	$20.00	1	Cash (Japanese yen)	¥10,000
DEPT 4	$30.00	1		

Preprogrammed exchange rate: $1.00/¥144 = 0.69444

Operation

2000 [DEPT 3] 3000 [DEPT 4] [SUB TOTAL] [CE]
10000 [CA/AMT TEND]

Receipt

```
DEPARTMENT 3    -20.00
DEPARTMENT 4    -30.00
          2NO
SUBTOTAL
              -50.00
CURRENCY EXCHANG
CASH          ¥10000
CASH          -69.44
CHANGE        -19.44
```

4-20 Temporarily Releasing Compulsories

Example

Tag		Tender		Compulsory
DEPT 1	$10.00	Check	$10.00	Check endorsement compulsory

Operation

1000 [DEPT 1] [CHK/TEND] [OPEN]

Receipt

```
DEPARTMENT 1      10.00
                  1No
CHECK
                  10.00
```

4-21 Text Print Function

The Flat-Long PLU keyboard lets you input text up to 21 characters long. When you press the Text Print key, the Flat-Long PLU keyboard changes function to become a character keyboard. At this time, you can insert the character sheet under the rubber cover of the Flat-Long PLU keyboard to identify the character.

- The character programming keyboard has an Uppercase (CAP) setting and Shift (SHIFT) setting, and is initially set for uppercase. The uppercase setting remains in effect until you press Shift. Once you press Shift the keyboard remains shifted you press the Uppercase (CAP) key again. Pressing the Clear key also changes the keyboard to uppercase characters.
- Pressing of Shift and Uppercase is not counted as a character.
- Presetting Double (DBL) specifies that the next character input is double size. You must press Double before you input each double size character. Each double size character is counted as two normal size characters.
- Use the B key (decimal point key on the standard keyboard) to delete the most recently input character. This key operates much like a backspace key.
- Even if you input text without starting a registration, the register automatically assumes that registration of a transaction is in progress after the characters are printed on the receipt and journal. Remember that you must finalize the transaction, or else attempts to change the Mode Switch position, change clerks, or change the receipt ON/OFF position produces an error.
- Once you press the Text Print key and begin inputting text, you can complete text input only by pressing the Text Print key again to print the text on the receipt and journal, or by pressing the Clear key (which does not print the text).
- When you input text before beginning registration of the transaction, the text is printed following the header line.

Example

Tag		Qty	Tender	
DEPT 1	$10.00	1		
Flat-PLU 01	($1.10)	1	Cash	$11.10

Printed text: "SPECIAL PRICE NO. 123"

Operation

[TEXT PRINT]
[CAP.][S][P][E][C][I][A][L][SPACE][P][R][I][C][E]
[TEXT PRINT] 1000 [DEPT] [TEXT PRINT]
[CAP.][N][SHIFT][O][CAP.][.][SPACE][DBL][1]
[SPACE][DBL][2] [SPACE][3] [TEXT PRINT] [01] [CA/AMT TEND]

Receipt

```
SPECIAL PRICE
DEPARTMENT 1      *10.00
No. 1 2 3
PLU 1             *1.10
              2No
CASH             *11.10
```

4-22 Printing Slips

Slip Printer Memory

To perform batch printing on the slip printer, you must first use the memory allocation operation (see Program 5 Mode in the Programming Manual) to reserve slip buffer memory. The capacity of the slip buffer memory is determined by the number of units of slip buffer memory reserved by the memory allocation operation.

The register can be programmed to check the status of the slip buffer memory whenever slip batch printing is performed, and to sound an alarm when the buffer memory is almost full. The alarm sounds when there are 13 lines or less remaining, and once it starts to sound, the only operation you can perform is the cancel operation or operations using one of the following keys.

[CA/AMT TEND], [CH], [CHK/TEND], [CREDIT], [FS/ST], [NS], [CE], [SUB TOTAL], [MO/ST], [VALID], [CHK/EDS], [OPEN], [SLIP F/R], [FS/ST], [SLIP F/R] key operation, cancel operation

You must perform one of the above operations when the slip buffer alarm sounds on a register programmed for "check slip buffer memory". Any other operation results in an error. Note that the register checks the slip buffer memory status only when it is programmed to do so. If the register is not programmed to "check slip buffer memory," registration will never be interrupted because of insufficient buffer capacity, but data that exceeds buffer capacity will not be printed on the slip.

Printing Slips

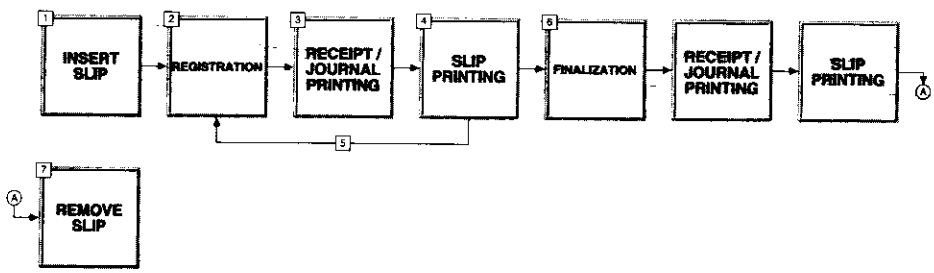
The cash register can be connected to the optional SP-1100 Slip Printer, which features an automatic feed function and automatic back feed function.

- Automatic Feed Function
  This function makes it possible to program the number of line feeds that should be inserted from the normal print start position before starting slip alternate printing or slip batch printing of a new slip. Even if line feeds are programmed for this function, they are not inserted for validation printing, check endorsement printing, and check printing performed using the slip printer. Note also that line feeds are not inserted automatically at the beginning of a second slip when the transaction requires printing that extends from one slip to another.
- Automatic Back Feed Function
  This function performs automatic back feed following alternate printing, batch printing, validation printing, and endorsement printing on the slip printer. The slip paper is released once the back feed operation is complete. This function can be canceled by programming.
- Manual Feed Function
  The Slip Feed/Release key (assigned to the register's keyboard using the Program 4 mode) can be used for the manual feed of the slip paper. You perform manual feed by inputting a value fir the number of lines (up to two digits in the range of 1 to 99) and then pressing the Slip Feed/Release key.

- Manual Back Feed Function
  The Slip Back Feed/Release key (assigned to the register's keyboard using the Program 4 mode) can be used for manual back feed of the slip paper. Manual back feed can be performed by inputting the number of lines (up to two digits, in the range of 1 to 99) and then pressing the Slip Back Feed/Release key.

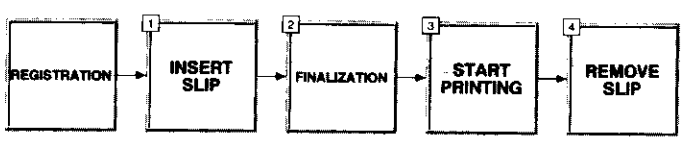
You can print slips using alternate printing or auto batch printing. The slip print operation can be performed in Reg 1, Reg 2, and RF modes only. Starting a registration without inserting a slip paper into the slip printer when the register is programmed as "slip paper insertion into slip printer compulsory before beginning registration" produces an error.

To perform alternate slip printing



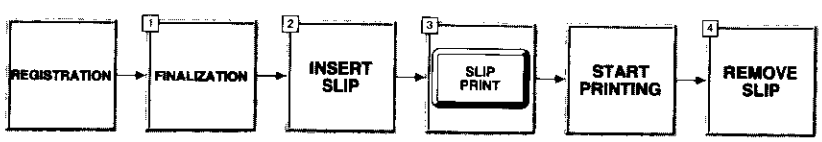
1. Insert a slip into the slip printer.
2. An error occurs here if you attempt to perform a registration without a slip in the slip printer when the register is programmed as alternate slip printing compulsory.
3. Each item you register is printed on the receipt and journal.
4. Each item you register is printed on the slip.
5. Loop here as required to register more items.
6. Temporarily finalize the registration using the New Balance key, or finalize the registration using one of the finalization keys.
7. Remove the slip from the slip printer.

To perform auto batch printing



1. Insert a slip into the slip printer.
2. Temporarily finalize the registration using the New Balance key, or finalize the registration using one of the finalization keys.
3. Printing starts after finalization is complete.
4. Remove the slip from the slip printer.

You can also use the following procedure to perform auto batch printing. The difference between this procedure and the one above is the timing of insertion of the slip into the printer.



1. Temporarily finalize the registration using the New Balance key, or finalize the registration using one of the finalization keys.

2. Insert a slip into the slip printer.
3. Press the Slip Print key to start slip printing.
4. Remove the slip from the slip printer.

4-23 Food Stamps

No Change Due

Example

Tag		Status	Tender	
DEPT 1	$1.00	Taxable 1, Food stamp		
DEPT 4	$2.00	Taxable 2	Food stamps Cash	$2.00 $4.20
DEPT 6	$3.00	Taxable 2, Food stamp→Non-taxable		

Operation

100 [DEPT 1] 200 [DEPT 4] [T1/S2] 300 [DEPT 6] [FS/ST]
200 [FS/TEND] [CA/AMT TEND]

Receipt

```
DEPARTMENT  1  T
                $1.00
DEPARTMENT  4  T
                $2.00
DEPARTMENT  6  T
                $3.00
          3No
TAXABLE AMOUNT 1$1.00
TAX  1          $0.06
TAXABLE AMOUNT 2$2.00
TAX  2          $0.09
SUBTOTAL
              $6.15
FSST            $4.06
FOODSTAMP TENDER$2.00
CASH            $4.15
```

Food Stamp Status Shift

Example

Tag		Status	Tender	
DEPT 1	$1.00	Taxable 1, Food stamp	Food stamps	$5.00
DEPT 2	$2.00	Taxable 2, Food stamp	Cash	$2.00
DEPT 3	$3.00	Taxable 1, Non-Food stamp→Food stamp		

Operation

100 [DEPT 1] 200 [DEPT 2] [F·S] 300 [DEPT 3] [FS/S-]
500 [FS/TEND] 200 [CA/AMT TEND]

Receipt

```
DEPARTMENT  1  T
                $1.00
DEPARTMENT  2  T
                $2.00
DEPARTMENT  3  T
                $3.00
          3No
TAXABLE AMOUNT 1$4.00
TAX  1          $0.24
TAXABLE AMOUNT 2$2.00
TAX  2          $0.09
SUBTOTAL
              $6.33
FSST            $6.33
FOODSTAMP TENDER$5.00
SUBTOTAL        $1.33
CASH            $2.00
CHANGE          $0.67
```

Mixed Food Stamp/Cash Change

Example 1

Tag		Status	Tender	
DEPT 1	$2.00	Taxable 1, Food stamp		
DEPT 2	$2.00	Taxable 2, Food stamp	Food stamps	$7.00
DEPT 5	$3.00	Food stamp		

Operation

100 [DEPT 1] 200 [DEPT 2] 300 [DEPT 5] [FS/ST]
700 [FS/TEND]

Receipt

```
DEPARTMENT 1 T
                $1.00
DEPARTMENT 2 T
                $2.00
DEPARTMENT 5 T
                $3.00
            3No
TAXABLE AMOUNT 1$1.00
TAX 1           $0.06
TAXABLE AMOUNT 2$2.00
TAX 2           $0.09
SUBTOTAL
              $6.15
FSST            $6.15
FOODSTAMP TENDER$7.00
CHANGE          $0.85
```

The cash register are preset with a limit of $1.00 payable as change in food stamp transactions. This means that change in food stamp transactions is automatically calculated as cash for amounts of $1.00 or less, and as food stamps for amounts greater that $1.00.

Example 2

Tag		Status	Tender	
DEPT 1	$2.00	Taxable 1, Food stamp	Food stamps	$5.00

Operation

200 [DEPT 1] [FS/ST] 500 [FS/TEND]●

1. An error occurs here if you try to perform this operation without first pressing the Food Stamp Subtotal key to calculate the food stamp subtotal.

Receipt

```
DEPARTMENT 1 T
                $2.00
            1No
TAXABLE AMOUNT 1$2.00
TAX 1           $0.12
SUBTOTAL
              $2.12
FSST            $2.12
FOODSTAMP TENDER$5.00
FSCG            $2.00
CHANGE          $0.88
```

In the above example, the total amount of change due is $2.88; $2.00 in food stamps and $0.88 in cash.

Example 3

Tag		Status	Tender	
DEPT 1	$2.00	Taxable 1, Food stamp	Food stamps	$5.00
DEPT 5	$0.50	Non-taxable		

Operation

200 [DEPT 1] 50 [DEPT 5] [FS/ST] 500 [FS/TEND]

Receipt

```
DEPARTMENT  1  TB
                $2.00
DEPARTMENT  5  $0.50
          2No
TAXABLE AMOUNT 1$2.00
TAX  1         $0.12
SUBTOTAL
              $2.62
FSST           $2.12
FOODSTAMP TENDER$5.00
FSCG           $2.00
CHANGE         $0.38
```

When food stamps are involved in a transaction, the amount of change due in cash is applied as a cash amount tendered for cash (non-food stamp) items.

In this example, the $0.50 purchase (Department 5) is automatically deducted from the $0.88 cash due in change from the food stamp purchase (Department 1).

Example 4

Tag		Status	Tender	
DEPT 1	$1.00	Taxable 1, Food stamp	Food stamps	$5.00
DEPT 4	$2.00	Taxable 2	Cash	$4.20
DEPT 5	$3.00	Taxable 1→Non-taxable		

Operation

100 [DEPT 1] 200 [DEPT 4] [TAX] 300 [DEPT 5] [FS/ST]
500 [FS/TEND] [CA/AMT/TEND]

Receipt

```
DEPARTMENT  1  TB
                $1.00
DEPARTMENT  4  T
                $2.00
DEPARTMENT  7  $3.00
          3No
TAXABLE AMOUNT 1$1.00
TAX  1         $0.06
TAXABLE AMOUNT 2$2.00
TAX  2         $0.09
SUBTOTAL
              $6.15
FSST           $1.06
FOODSTAMP TENDER$5.00
FSCG           $3.00
CASH           $4.15
```

The following calculation is performed internally to apply the cash change due on the food stamp transaction to the balance due of the cash transaction.

Food Stamp Transaction

Price of item: $1.00
Tax: $0.06
Total due: $1.06
Amount tendered: $5.00 (in food stamps)
Amount due: $1.06
Change amount due: $3.94 ($0.94 in cash, $3.00 in food stamps)

Cash Transaction

Price of items: $2.00 and $3.00
Tax: $0.14
Total due: $5.14
Amount tendered: $4.20 (cash) and $0.94 (change from food stamp transaction)
Total: $5.14

4-24 Food Stamps (Illinois Rules)

No Change Due

Example 1

Tag		Status	Tender	
DEPT 1	$1.00	Taxable 1, Food stamp		
DEPT 3	$2.00	Taxable 1, Food stamp	Food stamps	$6.00
DEPT 5	$3.00	Non-taxable, Food stamp		

Operation

100 [DEPT 1] 200 [DEPT 2]
300 [DEPT 5] [FS/ST] 600 [FS/TEND] ❶

1. An error occurs here if you try to perform this operation without first pressing the Food Stamp Subtotal key to calculate the food stamp subtotal.

Receipt

```
DEPARTMENT 1  T
              $1.00
DEPARTMENT 3  T
              $2.00
DEPARTMENT 5  F
              $3.00
          3No
SUBTOTAL     $6.00
FSST         $6.00
FOODSTAMP TENDER$6.00
```

Example 2

Tag		Status	Tender	
DEPT 1	$2.00	Taxable 1, Food stamp		
DEPT 3	$3.00	Taxable 1, Food stamp	Food stamps	$5.00
DEPT 4	$4.00	Taxable 1, Non-Food stamp	Cash	$4.24

Operation

200 [DEPT 1] 300 [DEPT 3] 400 [DEPT 4] [FS/ST]
500 [FS/TEND] [CA/AMT TEND]

Receipt

```
DEPARTMENT  1  T1
                $2.00
DEPARTMENT  3  T1
                $3.00
DEPARTMENT  4  T
                $4.00
          3No
FSST            $5.00
FOODSTAMP TENDER$5.00
TAXABLE AMOUNT 1$4.00
TAX  1          $0.24
CASH            $4.24
```

Example 3

Tag		Status	Tender	
DEPT 1	$2.00	Taxable 1, Food stamp	Food stamps	$1.00
DEPT 8	$3.00	Taxable 2, Food stamp	Cash	$4.27

Operation

200 [DEPT 1] 300 [DEPT 8] [FS/ST] 100 [FS/TEND] [CA/AMT TEND]

Receipt

```
DEPARTMENT  1  T1
                $2.00
DEPARTMENT  8  T1
                $3.00
          2No
FSST            $5.00
FOODSTAMP TENDER$1.00
TAXABLE AMOUNT 1$1.50
TAX  1          $0.09
TAXABLE AMOUNT 2$2.50
TAX  2          $0.11
CASH            $4.20
```

In the example shown above, the total of the food stamps tendered is less than the food stamp total. Therefore, half of the food stamp tendered amount ($1.00 × 50% = $0.50) is deducted from the Taxable 1 amount and the other half from the Taxable 2 amount.

Example 4

Tag		Status	Tender	
DEPT 1	$1.00	Taxable 1, Food stamp	Food stamps	$4.00
DEPT 8	$5.00	Taxable 2, Food stamp	Cash	$2.14

Operation

100 [DEPT 1] 500 [DEPT 8] [FS/ST] 400 [FS/TEND] [CA/AMT TEND]

Receipt

```
DEPARTMENT  1  T1
                $1.00
DEPARTMENT  8  T1
                $5.00
          2No
FSST            $6.00
FOODSTAMP TENDER$4.00
TAXABLE AMOUNT 2$2.00
TAX  2          $0.09
CASH            $2.09
```

As a rule, when the total of the food stamps tendered is less than the food stamp subtotal, half of the food stamp tendered amount ($ 4.00 × 50% = $2.00) is deducted from the Taxable 1 amount and the other half from the Taxable 2 amount. In this example, the Taxable 1 amount is only $1.00, so this is impossible. Here, $1.00 is deducted from the Taxable 1 amount (making the Taxable 1 amount "0"), and the remaining $3.00 is deducted from the Taxable 2 amount.

Food Stamp Status Shift

Example

Tag		Status	Tender	
DEPT 1	$1.00	Taxable 1, Food stamp		
DEPT 3	$2.00	Taxable 1, Food stamp	Food stamps	$5.00
DEPT 2	$3.00	Taxable 1, Non-Food stamp→Food stamp	Cash	$1.06

Operation

100 [DEPT 1] 200 [DEPT 3] [F/S] 300 [DEPT 2] [FS/ST]
500 [FS/TEND] [CA/AMT TEND]

Receipt

```
DEPARTMENT 1  T
                $1.00
DEPARTMENT 3  T
                $2.00
DEPARTMENT 2  T
                $3.00
          3No
FSST            $6.00
FOODSTAMP TENDER$5.00
TAXABLE AMOUNT 1$1.00
TAX 1           $0.06
CASH            $1.06
```

Mixed Food Stamp/Cash Change

Example 1

Tag		Status	Tender	
DEPT 1	$1.50	Taxable 1, Food stamp		
DEPT 3	$2.00	Taxable 1, Food stamp	Food stamps	$10.00
DEPT 5	$3.00	Non-taxable, Food stamp		

Operation

150 [DEPT 1] 200 [DEPT 3] 300 [DEPT 5] [FS/ST]
1000 [FS/TEND]

Receipt

```
DEPARTMENT 1  T
                $1.50
DEPARTMENT 3  T
                $2.00
DEPARTMENT 5  T
                $3.00
          3No
SUBTOTAL        $6.50
FSST            $6.50
FOODSTAMP TENDER
                $10.00
FSCG            $3.00
CHANGE          $0.50
```

The cash register is preset with a limit of $1.00 payable as change in food stamp transactions. This means that change in food stamp transactions is automatically calculated as cash for amounts of $1.00 or less, and as food stamps for amounts greater that $1.00. In the above example, the total amount of change due is $3.50; $3.00 in food stamps and $0.50 in cash.

Example 2

Tag		Status	Tender	
DEPT 1	$2.00	Taxable 1, Food stamp	Food stamps	$5.00

Operation

200 [DEPT 1] [FS/ST] 500 [FS/TEND]❶

1. An error occurs here if you try to perform this operation without first pressing the Food Stamp Subtotal key to calculate the food stamp subtotal.

Receipt

```
DEPARTMENT  1  T
                $2.00
          1No
TAXABLE AMOUNT 1$2.00
TAX  1          $0.12
SUBTOTAL
              $2.12
FSST            $2.12
FOODSTAMP TENDER$5.00
FSCG            $2.00
CHANGE          $0.88
```

Example 3

Tag		Status	Tender	
DEPT 1	$2.00	Taxable 1, Food stamp		
DEPT 3	$1.20	Taxable 1, Food stamp	Food stamps	$5.00
DEPT 6	$0.30	Taxable 1, Non-food stamp		

Operation

200 [DEPT 1] 120 [DEPT 3] 30 [DEPT 6] [FS/ST]
500 [FS/TEND]

Receipt

```
DEPARTMENT  1  T
                $2.00
DEPARTMENT  3  T
                $1.20
DEPARTMENT  6  T
                $0.30
          3No
TAXABLE AMOUNT 1$0.30
TAX  1          $0.02
SUBTOTAL       $3.52
FSST            $3.20
FOODSTAMP TENDER$5.00
FSCG            $1.00
CHANGE          $0.48
```

When food stamps are involved in a transaction, the amount of change due in cash is applied as a cash amount tendered for cash (non-food stamp) items. In this example, the $0.30 purchase (Department 6 plus $0.02 tax) is automatically deducted from the $0.80 cash due in change from the food stamp purchase (Departments 1 and 3).

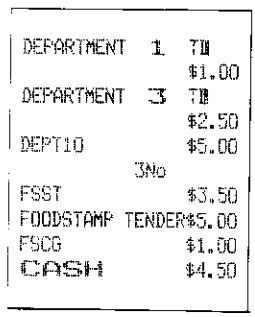
Example 4

Tag		Status	Tender	
DEPT 1	$1.00	Taxable 1, Food stamp		
DEPT 3	$2.50	Taxable 1, Food stamp	Food stamps	$5.00
DEPT 7	$5.00	Taxable 1, Food stamp→Non-taxable	Cash	$4.50

Operation

100 [DEPT 1] 250 [DEPT 3] [T/S] 500 [DEPT 7] [FS/ST]
500 [FS/TEND] [CA/AMT TEND]

Receipt



The following calculation is performed internally to apply the cash change due on the food stamp transaction to the balance due of the cash transaction.

Food Stamp Transaction

Price of items: $1.00 and $2.50
Tax: $0.00
Total due: $3.50
Amount tendered: $5.00 (in food stamps)
Amount due: $3.50
Change amount due: $1.50 ($0.50 in cash, $1.00 in food stamps)

Cash Transaction

Price of item: $5.00
Tax: $0.00
Total due: $5.00
Amount tendered: $4.50 (cash) and $0.50 (change from food stamp transaction)
Total: $5.00

Food Stamp + Taxable 1 and Taxable 2

When food stamps are received as partial tender for items preset with the status "food stamp, Taxable 1 and 2", the calculations are performed using one of the two methods described in this section. The method used depends on the food stamp amount received as partial tender.

Method 1

This method is used when the total amount of the items preset with the status "food stamp, Taxable 1 and 2" is greater than or equal to the food stamp amount received as partial tender. Method 1 subtracts the food stamp amount tendered from both the Taxable 1 amount and Taxable 2 amount.

Example

Tag		Status	Tender	
DEPT 1	$2.00	Taxable 1, Food stamp	Food stamps	$2.00
DEPT 8	$3.00	Taxable 2, Food stamp	Cash	$5.33
DEPT 5	$2.00	Taxable 1 & 2, Food stamp		

Operation

200 [DEPT 1] 300 [DEPT 8] 200 [DEPT 5] [FS/ST]
200 [FS/TEND] [CA/AMT TEND]

Receipt

```
DEPARTMENT  1  T1
                $2.00
DEPARTMENT  8  T1
                $3.00
DEPARTMENT  5  T1
                $2.00
          3No
FSST            $7.00
FOODSTAMP TENDER$2.00
TAXABLE AMOUNT 1$2.00
TAX  1          $0.12
TAXABLE AMOUNT 2$3.00
TAX  2          $0.14
CASH            $5.26
```

In this example, the food stamp received as partial tender is $2.00, so that amount is deducted from both the Taxable 1 amount and Taxable 2 amount. This means that the remaining Taxable 1 amount is $2.00, while the remaining Taxable 2 amount is $3.00.

Method 2

This method is used when the total amount of the items preset with the status "food stamp, Taxable 1 and 2" is less than the food stamp amount received as partial tender. Method 2 first subtracts the total of the items preset with the status" food stamp, Taxable 1 and 2" from the Taxable 1 amount and Taxable 2 amount. This total is also deducted from the food stamp amount received as partial tender. Next, half of the remaining amount of the partial food stamp tender is subtracted from the Taxable 1 amount; and the other half from the Taxable 2 amount.

Example

Tag		Status	Tender	
DEPT 1	$2.00	Taxable 1, Food stamp	Food stamps	$4.00
DEPT 8	$3.00	Taxable 2, Food stamp	Cash	$3.20
DEPT 5	$2.00	Taxable 1 & 2, Food stamp		

Operation

200 [DEPT 1] 300 [DEPT 8] 200 [DEPT 5] [FS/ST]
400 [FS/TEND] [CA/AMT TEND]

Receipt

```
DEPARTMENT  1  T1
                $2.00
DEPARTMENT  8  T1
                $3.00
DEPARTMENT  5  T1
                $2.00
          3No
FSST            $7.00
FOODSTAMP TENDER$4.00
TAXABLE AMOUNT 1$1.00
TAX  1          $0.06
TAXABLE AMOUNT 2$2.00
TAX  2          $0.09
CASH            $3.15
```

In this example, the $2.00 total for the item preset with the status "food stamp, Taxable 1 and 2" is deducted from the Taxable 1 amount, Taxable 2 amount and the food stamp amount received as partial tender ($4.00). Half of the remaining partial food stamp tender ($1.00) is deducted from the Taxable 1 amount ($2.00) and the other half is deducted from the Taxable 2 amount ($3.00). This leaves a Taxable 1 amount of $1.00 and a Taxable 2 amount of $2.00.

4-25 Gas Departments

The Gas Department Function causes the decimal place of the unit price preset for the applicable department key to be shifted one place to the left. This means that when you register a department which is programmed for two decimal places (0.00) gas, the unit price is registered in the format: 000.000.

When the amount received from the customer is input as a cash amount tendered using a gas department key, the amount of gas sold is automatically calculated from the cash amount tendered and the unit price programmed for the gas department key.

Note that the Gas Department Status is applied for preset unit prices only, and cannot be applied for manually input unit prices.

Basic Registration

Example

Tag	Preset Unit Price	Tender	
GAS DEPT 9	$1.109/gallon	Cash	$10.00

Operation

1000 [DEPT 9] [CA/AMT TEND]

1. The amount of gas sold (9.017 gallons) is automatically calculated from the cash amount tendered ($10.00) and the unit price programmed to the gas department key ($1.109/gallon).* The rounding system applied when calculating the amount of gas sold is programmable.

Receipt

```
9.017 ITEMS
          @ 1.109
GAS DEPT 9 T  $10.00
      9.017NO
TAXABLE 1     $10.00
TAX 1          $0.60
CASH $10.60
```

Calculation of Discounts

Gas department per unit discount amounts can be programmed for each finalize key, so that the discount applied to the gas department is applied at finalization.

Gas department per unit discount amounts are limited to programmed amounts (3 digits to the left of the decimal point, 3 digits to the right). Calculation of the discount amount cannot be performed using manually input per unit discount amounts.

Example

Tag	Preset Unit Price	Per Unit Discount Amount	Tender	
GAS DEPT 9	$1.100/gallon	$0.009/gallon	Cash	$10.00

In this example, the Cash Amount Tendered key is programmed for calculation of gas department discounts (discount for cash payments).

Operation

1000 [DEPT 9]● [CA/AMT TEND]

1. The discount amount is automatically calculated from the amount of gas sold (9.017 gallons) and the per unit discount amount programmed to the gas department key ($0.009/gallon).* The discount amount is printed on the receipt and journal.

Receipt

```
9.091 ITEMS
        @ 1.100
GAS DEPT 9 T  $10.00
     9.091No
TAXABLE 1     $10.00
TAX 1          $0.60
GAS DISCOUNT   -0.08
CASH $10.52
```

* Discount Amount × Amount of Gas Sold × Per Unit Discount Amount (Rounded)

- Discount calculations are performed for gas department registrations only, and not for normal department registrations.
- Discount calculations are not performed for gas department registrations involving negative units.
- Discount calculations are not performed when the total gas department registration monetary amount or quantity is negative.

Discount Subtotal Key Operation

Press the Discount Subtotal key during a gas department registration to display the subtotal amount after the discount is applied (at finalization). You can also program whether the subtotal amount is printed on receipts and journal. In a transaction where normal department registration and gas department registration are mixed, pressing this key adds the discounted gas department subtotal to the normal department subtotal. The subsequent result is displayed and printed.

Be sure that the rounding system and discount amount of the Discount Subtotal key matches that of the finalize key being used. Otherwise, the calculation operation will produce erroneous results.

Example 1

Tag	Preset Unit Price	Per Unit Discount Amount	Tender	
GAS DEPT 9	$1.100/gallon	$0.009/gallon	Cash	$10.00

Operation

1000 [DEPT 9] [SUB TOTAL]● [DC/ST] [CA/AMT TEND]●

1. Press the Subtotal key before attempting to perform a gas department discount calculation. Programming also allows specification between whether or not the subtotal amount is printed on receipts and the journal.
2. Press the Discount Subtotal key to automatically calculate the discount amount from the amount of gas sold (9.091 gallons) and the per unit discount amount ($0.009/gallon). The discounted subtotal amount appears on the display, and programming also allows specification between whether or not it is printed on receipts and the journal.

Receipt

```
9.091 ITEMS
        @ 1.100
GAS DEPT 9 T  $10.00
DISCOUNT/ST   $10.52
     9.091No
TAXABLE 1     $10.00
TAX 1          $0.60
GAS DISCOUNT   -0.08
CASH $10.52
```

Example 2

Tag	Preset Unit Price	Per Unit Discount Amount	Tender
GAS DEPT 9	$1.100/gallon (preset)	$0.009/gallon	Cash $10.00
DEPT 5	$10.00 (manual)	—	

In this example, the Cash Amount Tendered key is programmed for calculation of gas department discounts (discount for cash payments).

Operation

1000 [DEPT 9] 1000 [DEPT 5] [SUB TOTAL] [DC/ST] [CA/AMT TEND]

Receipt

```
9.091 ITEMS
          @ 1.100
GAS DEPT 9 T   $10.00
DEPARTMENT ST  $10.00
DISCOUNT/ST    $21.12
    10.091No
TAXABLE 1      $20.00
TAX 1          $1.20
GAS DISCOUNT   -0.08
CASH $21.12
```

Partial Cash Tender

Example

Tag	Preset Unit Price	Per Unit Discount Amount	Tender
GAS DEPT 9	$1.100/gallon	$0.009/gallon	Cash $6.00
			Credit $4.55

In this example, only the Cash Amount Tendered key is programmed to calculate gas department discounts. The Credit key is programmed to not apply the discount (discounts for cash payments only).

Operation

1000 [DEPT 9] 600 [CA/AMT TEND]❶ [CREDIT]

1. The discount amount for the $6.00 cash tender is automatically calculated from the amount of gas sold (9.091 gallons) and the per unit discount amount ($0.009/gallon)* The discount amount is printed on the receipt and journal.

Receipt

```
9.091 ITEMS
          @ 1.100
GAS DEPT 9 T   $10.00
    9.091No
TAXABLE 1      $10.00
TAX 1          $0.60
GAS DISCOUNT   -0.05
SUBTOTAL $10.55
CASH           $6.00
CREDIT         $4.55
```

Calculation of discount for $6.00 cash payment

$$\frac{\$6.00}{\$1.00 - \$0.009} = 5.500 \text{ gallons}$$

$$5.500 \text{ gallons} \times \$0.009 = \$0.05$$

$$\text{Amount of gas paid for in cash} = \frac{\text{Cash Amount Tendered}}{\text{Preset unit price} - \text{preset discount amount}}$$

$$\text{Cash discount} = \text{Amount of gas paid for in cash} \times \text{Preset discount amount}$$

Error Correction

The example here shows how to correct an error. When a discount calculation is performed during gas department registration, error correction of a partial tender results in both the cash amount tendered and the discounted portion being printed for the correction.

Operation

1000 [DEPT 9] 500 [CA/AMT TEND] [ERR/CASH] 600 [CA/AMT TEND] [CREDIT]

Receipt

```
   9.091 ITEMS
          @ 1.100
GAS DEPT 9 T   $10.00
     9.091No
TAXABLE 1      $10.00
TAX 1           $0.60
GAS DISCOUNT   -0.04
SUBTOTAL $10.56
CASH           $5.00
ERROR CORREC   -5.00
ERROR CORREC   $0.04
GAS DISCOUNT   -0.05
CASH           $6.00
CREDIT         $4.55
```

4-26 Check Tracking Systems

Check Tracking System (TK-2300/TK-2700)

With the TK-2300/TK-2700 check tracking system, only the amount, check number, number of slip print lines, clerk number, store number, and date/time data are stored. Registration details are not stored..

- Following finalization, check tracking number data is cleared from the check tracking memory as soon as either of the following two operations are performed:

  Slip printing or guest receipt issuance

  The next New Check, Old Check or New/Old Check key operation (only when no slip or guest receipt is printed)

- Auto Cash Function

  The register automatically considers operation of the New Balance key when a check is not open (normal registration without check tracking) to be a cash finalization operation, just as if the Cash key were pressed. The data registered by such an operation is used to update the totalizer and counter of the Cash key with the lowest address number. If there is no Cash key assigned to the keyboard when the New Balance key is pressed in the operation described above, an error results.

- Either of the following two operations can be used to correct input of a wrong check number.

  New Check Key

  Re-input the correct check number, or finalize the original check number, issue a receipt, and then re-input the correct check number.

  Old Check, New/Old Check Key

  Temporary finalize or finalize the original check number, issue a receipt, and then re-input the correct check number.

Opening a Check

Example

Check# 1234
Table# 33

Tag		Qty
DEPT 1	$10.00	2
DEPT 3	$20.00	2
DEPT 5	$15.00	1

Operation

CLERK ASSIGNMENT 1234 [NEW CHECK] 33 [TABLE No] 1000 [DEPT 1] [DEPT 1] 2000 [DEPT 3] 1500 [DEPT 5] INSERT SLIP [NB] REMOVE SLIP

Receipt

```
NEW CHECK          1234
TABLE NUMBER         33
DEPARTMENT 1      *10.00
DEPARTMENT 1      *10.00
DEPARTMENT 3      *20.00
DEPARTMENT 5      *15.00
SUBTOTAL
                  *55.00
NB SERVICE FEE     *0.50
                    4No
NEW BALANCE
                 *55.50
```

- An error is generated if a slip is not inserted when preset as compulsory for starting operations.
- If slip printing is not programmed as compulsory, you can print a slip at any time during the registration using the Slip Print key.

Adding to a Check

Example

Check# 1234
Table# 33

Tag		Qty
DEPT 1	$10.00	
DEPT 2	$25.00	1
DEPT 4	$18.00	2

Operation

INSERT SLIP 1234 [OLD CHECK]❶ [TIP/SY]❷ 1000 [DEPT 1] 2500 [DEPT 2] 1800 [DEPT 4] [DEPT 4] [NB]❸ REMOVE SLIP

1. Input a check number to recall the check memory and feed the slip using the autom line find function. Errors occur if the input check number does not exist in memory or if the check number is not input when it is programmed as compulsory.
2. Perform this operation to check the previous subtotal.
3. Press the New Balance key to temporarily finalize the transaction. Checks opened using the New Check key must be finalized using the New Balance Key, and no by using the Cash Amount Tendered, Charge, Check Tendered, or Credit key.

Receipt

```
OLD CHECK    1234
SUBTOTAL
                 *55.50
DEPARTMENT 1    *10.00
DEPARTMENT 2    *25.00
DEPARTMENT 4    *18.00
DEPARTMENT 4    *18.00
SUBTOTAL
                *126.50
NB SERVICE FEE   *0.50
          8No
NEW BALANCE
        *127.00
```

- The table number is stored in the check memory so its input is not required in this operation even if table number input is preset as compulsory. Table number input after inputting the check number may be performed, however, without generating an error.
- Once a check is opened under a number in a certain mode (Reg 1 or Reg 2), the same mode must be used to make additions to the check.

Closing a Check Memory

Operation

INSERT SLIP 1234 [OLD CHECK] 15000 [CA/AMT TEND]

Receipt

```
OLD CHECK      1234
SUBTOTAL
                ·127.00
          8No
SUBTOTAL
          ·127.00
CASH           ·150.00
CHANGE          ·23.00
```

Slip

```
SEG  01-07-92                21:50
A. MORRIS        1234          371
   NEW CHECK                  1234
   TABLE NUMBER                 33
   DEPARTMENT 1               ·10.00
   DEPARTMENT 1               ·10.00
   DEPARTMENT 3               ·20.00
   DEPARTMENT 5               ·15.00
   SUBTOTAL                   ·55.00
   NB SERVICE FEE              ·0.50
        4No
# 12 NEW BALANCE              ·55.50
   OLD CHECK                  1234
   SUBTOTAL                   ·55.50
   DEPARTMENT 1               ·10.00
   DEPARTMENT 2               ·25.00
   DEPARTMENT 4               ·18.00
   DEPARTMENT 4               ·18.00
   SUBTOTAL                  ·126.50
   NB SERVICE FEE              ·0.50
        8No
# 22 NEW BALANCE             ·127.00
   OLD CHECK                  1234
   SUBTOTAL                   ·127.00
        8No
   SUBTOTAL                  ·127.00
   CASH                       ·150.00
   CHANGE                      ·23.00
```

New/Old Check Key Operation

Example 1

When a check number is input and the New/Old Check key is pressed, the key works as a New Check key function if there is no matching check number in the check tracking memory.

Operation

123456 [NEW/OLD CHECK]❶ 500 [DEPT 1] 1000 [DEPT 2] [NS]❶

1. Input a check number and press the New/Old Check key.
2. Press this key to temporarily finalize the transaction.

Receipt

```
NEW/OLD CHECK
        123456
DEPARTMENT 1    ·5.00
DEPARTMENT 2   ·10.00
SUBTOTAL
                ·15.00
NB SERVICE FEE  ·0.50
          2No
NEW BALANCE
          ·15.50
```

Example 2

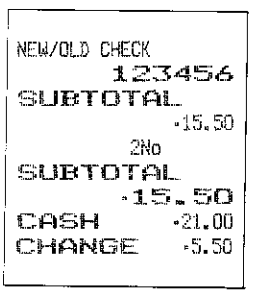
When a check number is input and the New/Old Check key is pressed, the key works as an Old Check key if there is no matching check number in the check tracking memory.

Operation

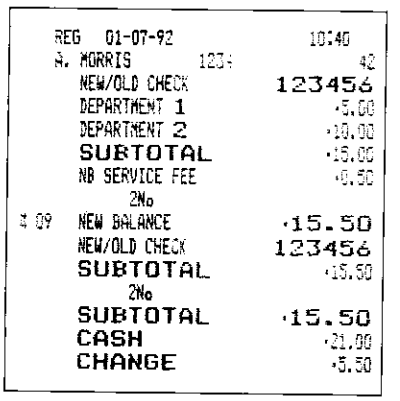
123456 [NEW/OLD CHECK] 2100 [CA/AMT TEND]

1. Input the check number.
2. Input the amount tendered and finalize the transaction.

Receipt



Slip



4-27 New Balance and Previous Balance

You can program the New Balance key to provide a check digit for the amount obtained by temporary finalization when the cash register is programmed to "include table tax in new balance system." The check digit is printed on receipts, journal and slips, but is not displayed. Once a check digit is provided, you must input it with the amount obtained by temporary finalization when you input the previous balance using the Previous Balance Plus or Previous Balance Minus key. If you fail to input a check digit or if you input it incorrectly, an error will occur. You can also program addition of a service fee for the temporary finalize operation.

How the New Balance Totalizer works

1. Whenever the New Balance key is pressed for temporary finalization, the temporary finalization amount and the finalize operation handling fee is added to the New Balance Total Totalizer.
2. Amounts input using the Previous Balance Plus key are subtracted from the New Balance Total Totalizer, while amounts input using the Previous Balance Minus key are added.
3. A decision is then made whether a transaction temporarily finalized by the New Balance key is still present, or whether improper operation of the Previous Balance Plus or Previous Balance Minus key has occurred. The decision is arrived at according to whether the result produced by steps 1 and 2 (stored in the New Balance Total Totalizer) is positive, negative or zero.

   Positive: Transaction not yet complete

   Zero: Entire transaction completed normally

   Negative: Error in operation

Non-Taxable Transactions

Example

First Transaction		Second Transaction		Tender	
DEPT 1	$30.00	DEPT 3	$80.00	Cash	$130.00
DEPT 2	$10.00	DEPT 4	$1.50		

First Transaction

Operation

Insert Check 1234 [#] 3000 [DEPT 1] 1000 [DEPT 2] [NB] Remove Slip

1. Input a reference number. This input is optional, but it helps to keep track of later transactions on the same slip. An error occurs at this point if you haven't inserted a slip into the printer and the register is programmed for alternate slip printing compulsory.
2. This operation calculates the total of the transaction as a new balance for later payment. If a check digit is provided, it will be printed on the receipt, journal and slip, without being displayed.

Receipt

```
NUMBER      1234
REG 01-07-92 19:06
A. MORRIS 1234    297

DEPARTMENT 1    ·30.00
DEPARTMENT 2    ·10.00
NB SERVICE FEE   ·0.50
          2No
NEW BALANCE         -1
        ·40.50
```

Second Transaction

Operation

Insert Slip 8 [SUP F-R] 1234 [#] 40501 [PB+] 8000 [DEPT 3] 150 [DEPT 4] 13000 [CA/AMT TEND] Remove Slip

1. Input the latest new balance. The Previous Balance Plus key can be programmed as postive (plus) or negative (minus).

Receipt

```
NUMBER      1234
REG 01-07-92 19:07
A. MORRIS 1234    298

PREVIOUS BALANCE
                ·40.50
DEPARTMENT 3    ·80.00
DEPARTMENT 4     ·1.50
          2No
SUBTOTAL
              ·122.00
CASH          ·130.00
CHANGE          ·8.00
```

Slip

```
      NUMBER                1234
   REG  01-07-92           19:06
   A. MORRIS      1234        297
      DEPARTMENT 1          ·30.00
      DEPARTMENT 2          ·10.00
      NB SERVICE FEE         ·0.50
           2No
I 08  NEW BALANCE         ·40.50-1
      NUMBER                1234
   REG  01-07-92           19:07
   A. MORRIS      1234        298
      PREVIOUS BALANCE      ·40.50
      DEPARTMENT 3          ·80.00
      DEPARTMENT 4           ·1.50
           2No
      SUBTOTAL             ·122.00
      CASH                 ·130.00
      CHANGE                 ·8.00
```

Taxable Transaction — 1

Example

First Transaction		Second Transaction	
DEPT 1	$10.00 (taxable status 4)	DEPT 3	$30.00 (taxable status 4)
DEPT 5	$50.00 (taxable status 4)		

First Transaction

Operation

Insert Slip 1000 [DEPT 1]● 5000 [DEPT 5] [NS]● Remove Slip

1. An error occurs here if you haven't inserted a slip into the printer and the register is programmed for slip printing compulsory.
2. This operation calculates the taxable amount, tax, and the total total of the transaction as a new balance (including tax) for later payment. If the register is programmed to produce a check digit, it is printed on the receipt, journal and slip without being displayed.

Receipt

```
DEPARTMENT 1   T4
                ·10.00
DEPARTMENT 5   T4
                ·50.00
NB SERVICE FEE  ·0.50
          2No
NEW BALANCE          -9
        ·60.50
```

Second Transaction

Operation

Insert Slip 7 [SLIP F/R]● 61100 [%-]● 3000 [DEPT 3] [CA/AMT TEND] Remove Slip

1. You can align the next line to be printed either by inputting the number of lines to be fed using the Slip Feed/Release key, or by manually aligining the slip by inputting it from the side of the printer.
2. This operation calculates the latest new balance (registered as non-taxable). An error occurs here if you haven't inserted a slip into the printer and the register is programmed for alternate slip printing compulsory.
   When inputting the amount, be sure to include the check digit if one was provided.

Receipt

```
PREVIOUS BALANCET4
                ·60.50
DEPARTMENT 3   T4
                ·30.00
          1No
TAXABLE AMOUNT 4
                ·90.50
TAX 4           ·4.53
CASH          ·95.03
```

Slip

```
REG  01-07-92                19:10
A. MORRIS      1234            300
   DEPARTMENT 1   T4           ·10.00
   DEPARTMENT 5   T4           ·50.00
   NB SERVICE FEE              ·0.50
         2No
# 37  NEW BALANCE            ·60.50-9
REG  01-07-92                19:11
A. MORRIS      1234            301
   PREVIOUS BALANCET4          ·60.50
   DEPARTMENT 3   T4           ·30.00
         1No
   TAXABLE AMOUNT 4            ·90.50
   TAX 4                        ·4.53
   CASH                       ·95.03
```

Taxable Transaction — 2

Example

First Transaction		Second Transaction	
DEPT 1	$10.00 (taxable status 4)	DEPT 3	$30.00 (taxable status 4)
DEPT 5	$50.00 (taxable status 4)		

First Transaction

Operation

Insert Slip 1000 [DEPT 1]● 5000 [DEPT 5] [NB]● Remove Slip

1. An error occurs here if you haven't inserted a slip into the printer and the register is programmed for slip printing compulsory.
2. This operation calculates the taxable amount, tax, and the total total of the transaction as a new balance (including tax) for later payment. If the register is programmed to produce a check digit, it is printed on the receipt, journal and slip without being displayed.

Receipt

```
DEPARTMENT 1   T4
              ·10.00
DEPARTMENT 5   T4
              ·50.00
NB SERVICE FEE ·0.50
          2No
NEW BALANCE       -9
        ·60.50
```

Second Transaction

Operation

Insert Slip 7 [SLIP F/N] [T/S] 1000 [PB+] 60509 [PB+] 3000 [DEPT 3] [CA/AMT TEND] Remove Slip

Receipt

```
PREVIOUS BALANCE
              ·61.00
DEPARTMENT 3   T4
              ·30.00
          1No
TAXABLE AMOUNT 4
              ·30.00
TAX 4         ·1.50
CASH        ·92.50
```

Slip

```
   REG  01-07-92              19:24
   A. MORRIS      1234          315
      DEPARTMENT 1   T4        ·10.00
      DEPARTMENT 5             ·50.00
      TAXABLE AMOUNT 4         ·10.00
      TAX 4                    ·0.50
      NB SERVICE FEE           ·0.50
          2No
# 09  NEW BALANCE            ·61.00-1
   REG  01-07-92              19:25
   A. MORRIS      1234          316
      PREVIOUS BALANCE         ·61.00
      DEPARTMENT 3   T4        ·30.00
          1No
      TAXABLE AMOUNT 4         ·30.00
      TAX 4                    ·1.50
      CASH                   ·92.50
```

Taxable Transaction — 3

Example

First Transaction		Second Transaction	
DEPT 1	$10.00 (taxable status 1)	DEPT 3	$30.00 (taxable status 1)
DEPT 2	$20.00 (taxable status 1)		

First Transaction

Operation

Insert Slip 1000 [DEPT 1] 2000 [DEPT 2] [NB]
Remove Slip

Receipt

```
DEPARTMENT 1   T4
                ·10.00
DEPARTMENT 2   T4
                ·20.00
TAXABLE AMOUNT 4
                ·30.00
TAX 4           ·1.00
NB SERVICE FEE  ·0.50
            2No
NEW BALANCE          -2
          ·30.50
```

Second Transaction

Operation

Insert Slip 6 [SLIP F/R] [T/S] 30502 [PLU] 3000 [DEPT 3] [CA/AMT TEND] Remove Slip

Receipt

```
PREVIOUS BALANCET4
                ·30.50
DEPARTMENT 3   T4
                ·30.00
            1No
TAXABLE AMOUNT 4
                ·60.50
TAX 4           ·3.03
CASH          ·63.53
```

Slip

```
   REG  01-07-92              19:18
   A. MORRIS      1234          310
      DEPARTMENT 1   T4        ·10.00
      DEPARTMENT 2   T4        ·20.00
      TAXABLE AMOUNT 4         ·30.00
      TAX 4                    ·1.00
      NB SERVICE FEE           ·0.50
           2No
# 09  NEW BALANCE             ·30.50-2
   REG  01-07-92              19:19
   A. MORRIS      1234          311
      PREVIOUS BALANCET4       ·30.50
      DEPARTMENT 3   T4        ·30.00
           1No
      TAXABLE AMOUNT 4         ·60.50
      TAX 4                    ·3.03
      CASH                   ·63.53
```

4-28 Registrations that Move the Decimal Point

Example

Tag		Preset Unit Price		Qty	Tender
DEPT 1	$100.00	DEPT 1	($1.00)	1	Cash$100.00

Operation

[DEPT 1] [CA/AMT TEND]

Receipt

```
DEPARTMENT 1 ·100.00
           1No
CASH
          ·100.00
```

5

Read and Reset Reports

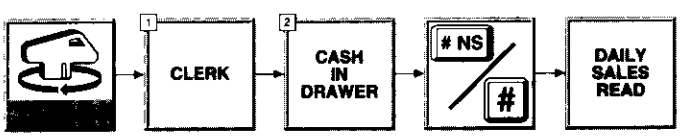
Use the procedures described in this section to issue READ and RESET reports of transaction data.

5-1 Daily Sales Data READ (X1 Mode)

The X1 Mode is also used to read daily sales data. Use this procedure to check sales data without deleting any data. This procedure provides the following reports.

- Individual Department Report
- Individual PLU Report
- Individual Group Report
- Individual Clerk Accountability Report
- PLU Range Report
- Long PLU Stock Range Report
- Fixed Totalizer Report
- Free Function Report
- PLU or PLU Group Report
- Department Report
- Group Total Report
- Clerk Accountability Report
- Hourly Sales Report
- Monthly Sales Report
- Long PLU Stock Report
- Financial Report

To prepare for daily sales data read



1. Input a 4-digit clerk secret number.
2. Count the cash in the drawer and input the amount, up to 10 digits. You can skip this step if it is not programmed as compulsory. When you input an amount here, the difference between the amount you input and the amount accumulated in the cash in drawer totalizer is printed on the report.

In the flowcharts in this manual, the above procedure is indicated by the following symbol:

5-2 Resetting Daily Sales Data (Z1 Mode)

Perform the daily sales RESET operation at the end of the business day, to clear (reset) the memory as the data is printed. This procedures provides the following reports.

- Individual Cashier Accountability Report
- PLU Range Report
- Long PLU Stock Range Report
- Fixed Totalizer Report
- Free Function Report
- PLU or PLU Group Report
- Department Report
- Group Total Report
- Clerk Accountability Report
- Hourly Sales Report
- Monthly Sales Report

To prepare for daily sales data reset

1. Input a 4-digit clerk secret number.
2. Count the cash in the drawer and input the amount, up to 10 digits. You can skip this step if it is not programmed as compulsory. Money declaration compulsory is applied only for the issuance of the Daily Fixed Totalizer Report, and the Clerk Accountability Report.

In the flowcharts in this manual, the above procedure is indicated by the following symbol:

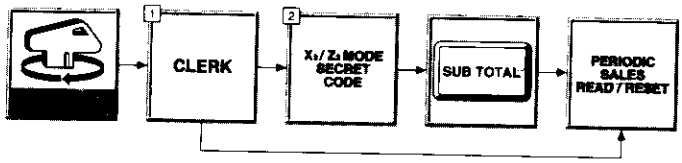
5-3 Periodic Sales Read and Reset (X2/Z2 Mode)

The periodic totalizer functions accumulate daily sales data by week, month, or any other period. Periodic sales READ and RESET allow you to obtain the following reports.

- PLU Range Report
- Fixed Totalizer Report
- Free Function Report
- PLU or PLU Group Report
- Department Report
- Group Total Report
- Clerk Accountability Report
- Hourly Sales Report
- Monthly Sales Report

This operation can be protected by an X2/Z2 secret code that makes it impossible to perform the operations unless the correct secret code is used.

To prepare for periodic sales data read and reset



1. Input a 4-digit clerk secret number. Proceed with the following steps if a X2/Z2 Mode secret password has been programmed. If no secret password is programmed, cash register goes directly into the periodic sales read/reset operation.
2. Input the X2/Z2 mode secret password. An error occurs if you try to enter the periodic sales read/reset operation without inputting a password (when one is programmed), or if the password you input does not match the one programmed for the register.

In the flowcharts in this manual, the above procedure is indicated by the following symbol:

5-4 Issuing Reports

Read and Reset Reports

- The formats of read reports are similar to those of reset reports, except that the reset reports contain the symbol "Z" and the non-resettable number of resets at the top. Also, the non-resettable grand total is printed on the Fixed Totalizer Reset Report.
- If money declaration is programmed as compulsory, you must input an amount before you can perform read or reset operations, otherwise an error tone will sound and the cash register will lock. Press the Clear key to clear the error.
- "OV" is printed on the left side of the "Z" symbol on the Reset Report if an overflow occurs in any of the totalizers.
- A report header message (report title) that indicates the report code and report contents is printed in the header line of each report. The report header message is programmable up to maximum of 12 characters. It should be noted, however, that the report header message is programmable for each totalizer, and not for each report code. This means that the same report header message is printed for the Daily Sales Read Report (X1 mode), Daily Sales Reset Report (Z1 mode), Periodic Sales Read Report (X2 mode), Periodic Sales Reset Report (Z2 mode), and Individual Read/Reset Report (X1 or Z1 mode).

Programmability

Report issuance can be programmed with the following features:

- Suppress printing of zero-total lines
- Money declaration compulsory
- Report header message (report title)
- Output sales ratios

- Suppress printing of grand total
- Print two copies of the Fixed Totalizer Reset Report
- Print PLU number/random PLU codes on The PLU Report and Individual PLU Report
- Clear (RESET) actual stock quantity when the Stock Reset Report is issued
- Printing control for totalizers and counters in the report
- Starting time period for the Hourly Sales Report
- Prints the monthly sales average amount on the Monthly Sales Report

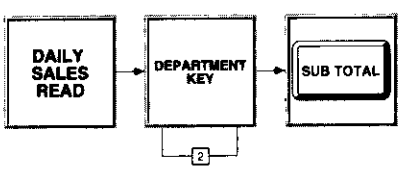
Issuing Reports

The following procedures are available for issuing reports.

- Individual Read Report issuance (reset also available for Individual Clerk Accountability Report)
- PLU Range Read/Reset Report issuance
- Report code input for individual totalizers for Read/Reset report issuance for each totalizer
- Batch Read/Reset report issuance for report groups

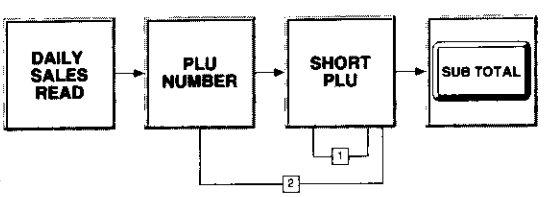
Individual Read Reports

Individual Department



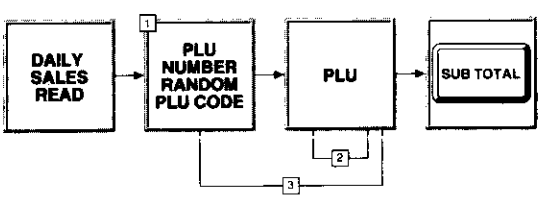
1. Loop here to press another department key.

Individual Short PLU



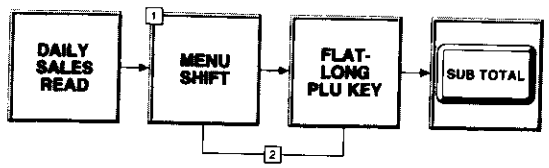
1. Loop here to print a report for the next sequential Short PLU.
2. Loop here to print a report for another (non-sequential) Short PLU.

Individual Long PLU



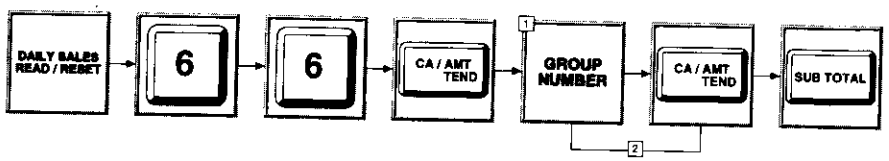
1. Loop here to print a report for the next sequential Long PLU.
2. Loop here to print a report for another (non-sequential) Long PLU.

Individual Flat-Long PLU



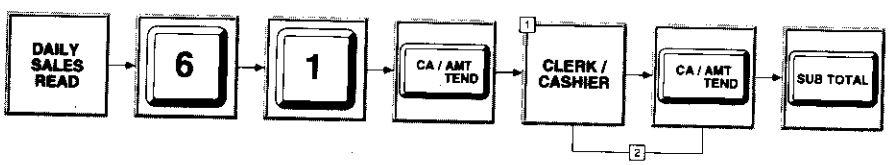
1. Shift to the 1st, 2nd, or 3rd menu if necessary.
2. Loop here to print a report for another Flat-Long PLU.

Individual Group



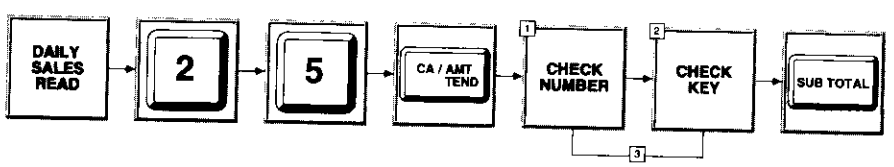
1. Input a 2-digit group number.
2. Loop here to input another group number.

Individual Clerk Open Check



1. Input a 2-digit clerk memory number.
2. Loop here to input another clerk memory number.

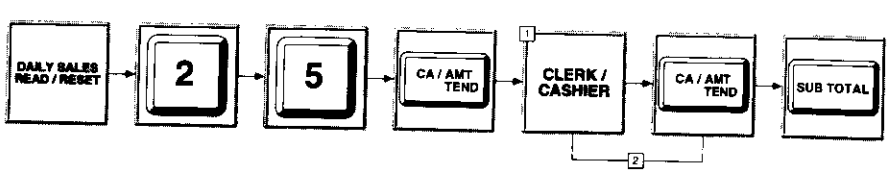
Individual Open Check



1. Input a check number.
2. Press the New Check, Old Check, or New/Old Check key.
3. Loop here to input another check number.

Individual Read/Reset Reports

Individual Clerk Accountability



1. Input the memory number for the clerk whose data you want to print.
2. Loop here to input another clerk memory number.

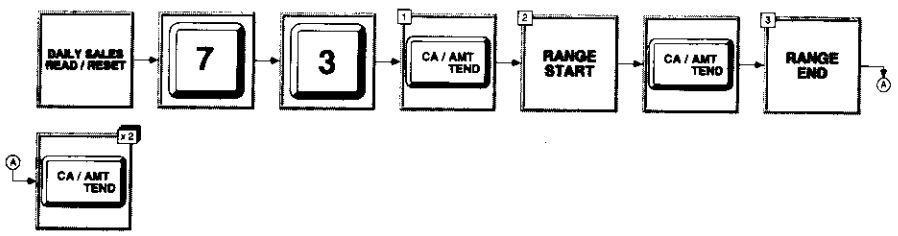
Each clerk is assigned a clerk fixed totalizer and a clerk detail totalizer. The configuration of the clerk detail totalizers is programmable.

PLU Range Read/Reset Reports

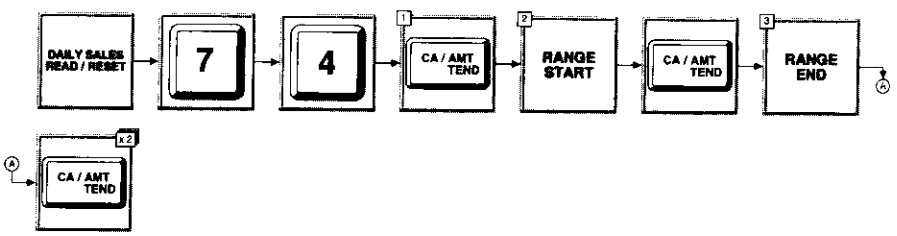
A range of PLUs can be specified for read or reset of Short PLU sales data, Long PLU sales data or Long PLU stock data.

PLU Daily Sales Range

Short PLU



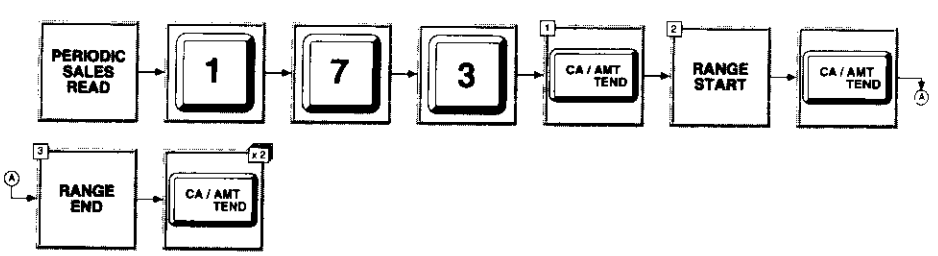
Long PLU

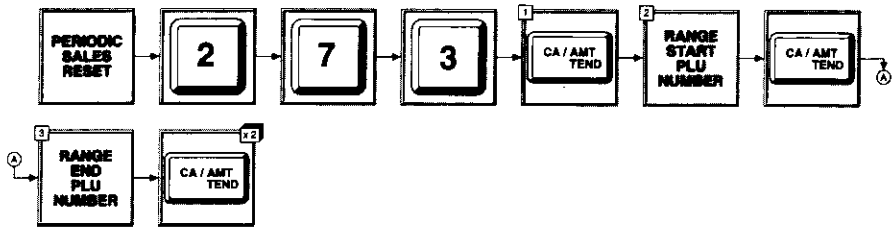


1. Cash Amount Tendered key on the standard keyboard.
2. Input the start of the range. In the case of Short PLUs, input a PLU number. In the case of a Long PLU, input a PLU number or a random PLU code. Skipping this entry causes the range to start from PLU memory 1.
3. Input the end of the range. In the case of Short PLUs, input a PLU number. In the case of a Long PLU, input a PLU number or a random PLU code. Skipping this entry causes the range to end with the last PLU memory number that exists in memory.

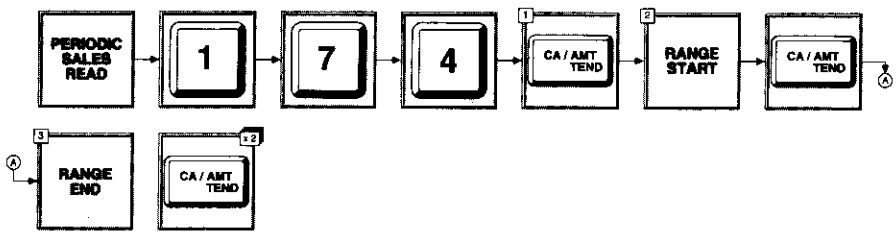
PLU Periodic Sales Range

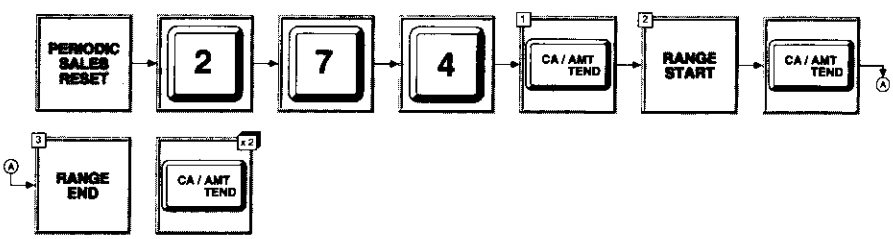
Short PLU





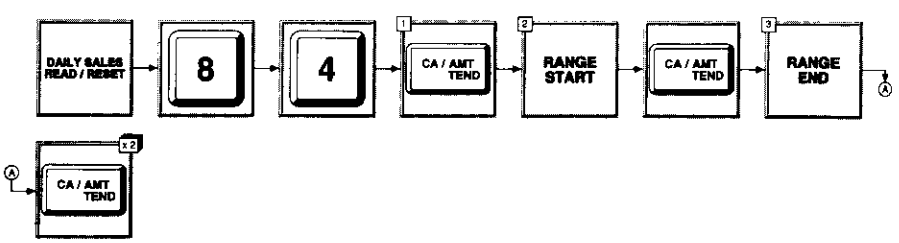
Long PLU





1. Cash Amount Tendered key on the standard keyboard.
2. Input the start of the range. In the case of Short PLUs, input a PLU number. In the case of a Long PLU, input a PLU number or a random PLU code. Skipping this entry causes the range to start from PLU memory 1.
3. Input the end of the range. In the case of Short PLUs, input a PLU number. In the case of a Long PLU, input a PLU number or a random PLU code. Skipping this entry causes the range to end with the last PLU memory number that exists in memory.

Long PLU Stock Range



1. Cash Amount Tendered key on the standard keyboard.
2. Input a Long PLU number or a random PLU code. Skipping this entry causes the range to start from PLU memory 1.
3. Input a Long PLU number or a random PLU code. Skipping this entry causes the range to end with the last PLU memory number that exists in memory.

Individual Totalizer Reports

You can issue read and reset reports for individual totalizers by inputting the applicable report code. Issuing a report may or may not open the drawer, depending on the type of totalizer being reported.

Report Code Table

Report Code				Totalizer Type	Drawer Opens When a Report is Issued
Daily Sales		Periodic Sales			
Read	Reset	Read	Reset		
11	11	1111	211	Fixed totalizer	YES
12	12	112	212	Free function	NO
13	13	113	213	Short PLU or Short PLU Group	NO
14	14	114	214	Long PLU or Long PLU Group	NO
15	15	115	215	Department	NO
16	16	116	216	Group total	NO
17	17	117	217	Clerk	YES
19	19	119	219	Hourly sales	NO
20	20	120	220	Monthly sales	NO
28	28	128	228	Table analysis	NO
64	64	—	—	Long PLU Stock	NO
71	—	—	—	Financial	YES
81*	81*	181*	281*	Flat-Long PLU 1st menu only *1	NO
82*	82*	182*	282*	Flat-Long PLU 2nd menu only *1	NO
83	83 *2	183	283 *2	Flat-Long PLU 3rd menu only	NO

*1 This operation is possible only when inventory amounts, number of items, and monetary amounts registered using Flat-Long PLU menus 1 and 2 are being accumulated into menu 3 totalizers.

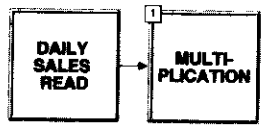
*2 The cash register can be programmed to issue reports for menu 3 only, resetting the menu 3 totalizers and counters only, or to issue reports for menu 3 only, resetting the menu 1, 2, and 3 totalizers and counters.

To issue daily sales reset reports

1. Input a 2-digit report code from the above table.
2. Cash Amount Tendered key on the standard keyboard.

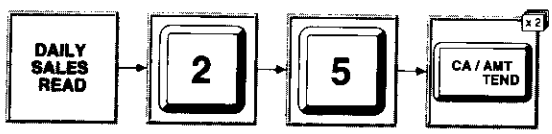
To issue periodic sales read/reset reports

1. Input a 2-digit report code from the above table.
2. Cash Amount Tendered key on the standard keyboard.



1. Press one of the multiplication key. The multiplication key used depends on what type of key is assigned to the keyboard.

...k Report



Batch Report Issuance for Report Groups

Reports for totalizer types can be assigned to groups under a group number. Then batch read/reset operations can be performed for an entire group by simply inputting the group number. It should be noted, however, that to perform this operation you must use the memory allocation operation to reserve batch read/reset operation memory (see the Programming Manual).

Up to 10 totalizer type report codes can be assigned to a single group, and each group report can be programmed for issuance in specific modes (X1, Z1, X2 or Z2). You can also specify issuance of a Periodic Sales Read Report (X2 Mode) or a Periodic Sales Reset Report (Z2 Mode) for the X2/Z2 mode.

Note that the following reports cannot be included as part of a report group.

- Individual Department Read/Reset Report
- Individual Short PLU Read/Reset Report
- Individual Long PLU Read/Reset Report
- Individual Clerk Accountability Read/Reset Report
- Individual Group Read/Reset Report
- Individual PLU Range Read/Reset Report
- Financial Report

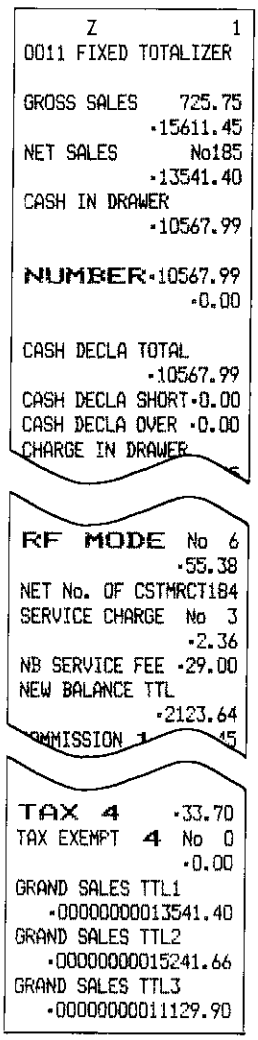
The batch read operation (X1 or X2 mode) can be performed using a report group without losing any data. The batch reset operation (Z1 Mode or Z2 Mode) issues a report and then clears the memory.

To batch issue reports

Example Report Printouts

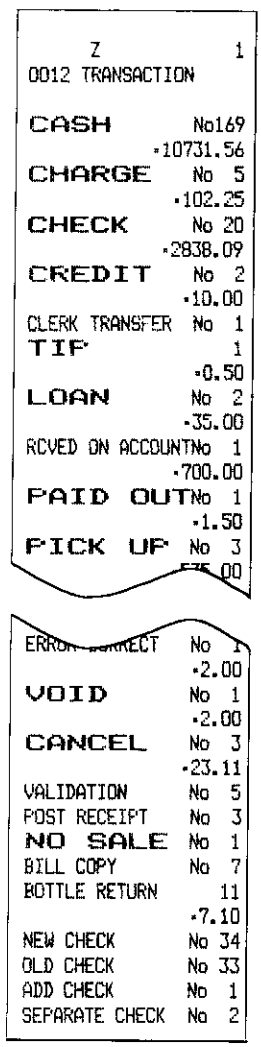
Fixed Totalizer Report

Report Code: 11



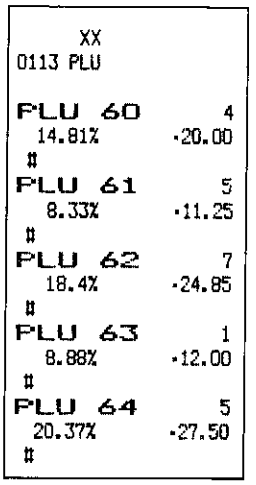
Free Function Report

Report Code: 12



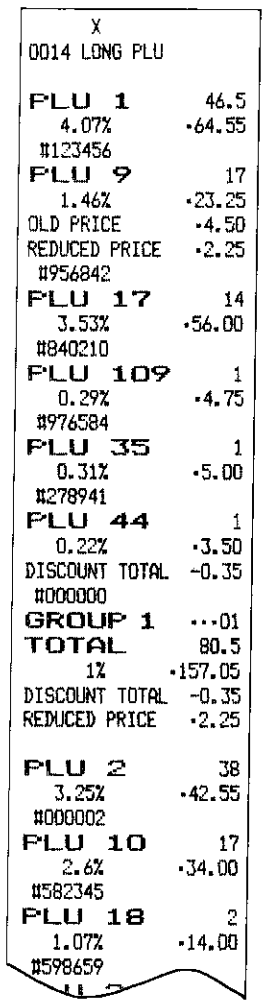
Short PLU or Short PLU Group Report

Report Code: 13



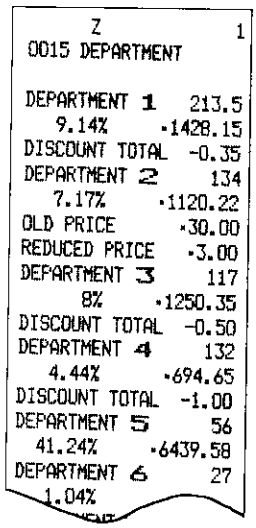
Long PLU or Long PLU Group Report

Report Code: 14



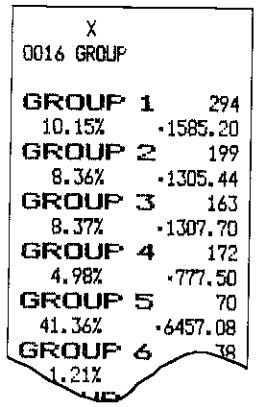
Department Report

Report Code: 15



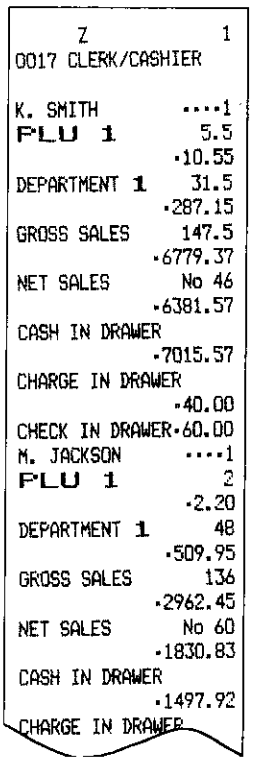
Group Total Report

Report Code: 16



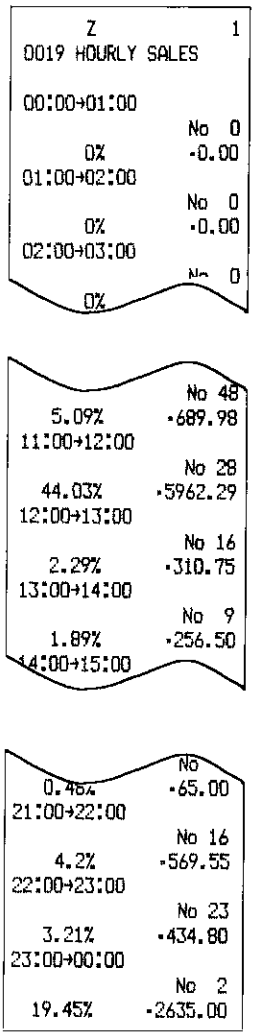
Clerk Accountability Report

Report Code: 17



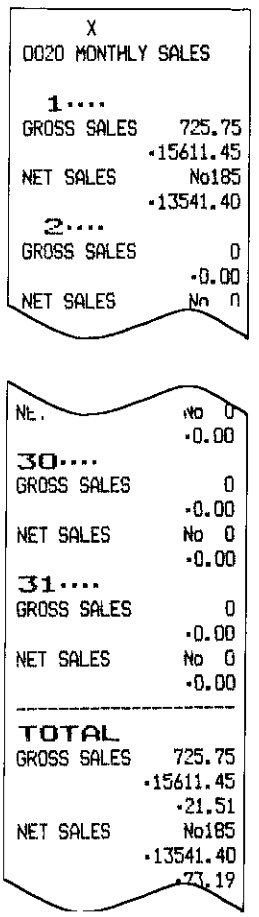
Hourly Sales Report

Report Code: 19



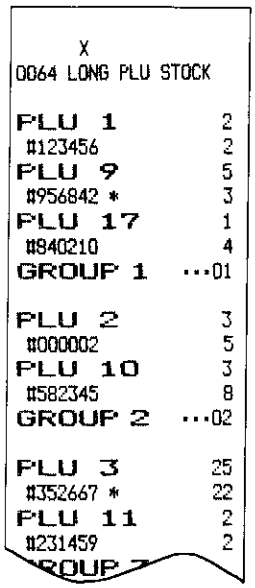
Monthly Sales Report

Report Code: 20



Long PLU Stock Report

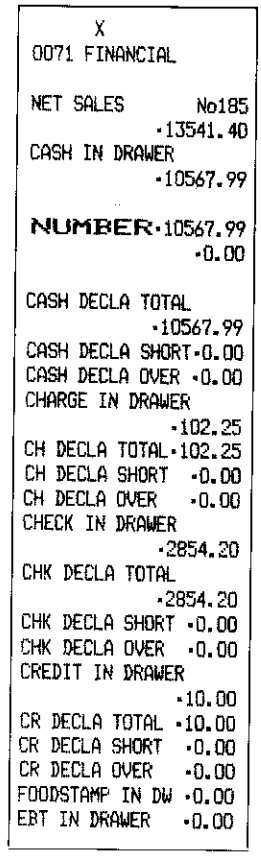
Report Code: 64



```
          X
0064 LONG PLU STOCK

PLU 1                2
 #123456             2
PLU 9                5
 #956842 *           3
PLU 17               1
 #840210             4
GROUP 1          ...01

PLU 2                3
 #000002             5
PLU 10               3
 #582345             8
GROUP 2          ...02

PLU 3               25
 #352667 *          22
PLU 11               2
 #231459             2
ROUP 7
```

Financial Report

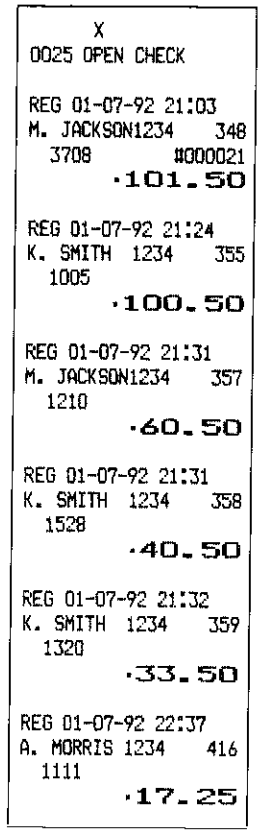
Report Code: 71



```
          X
0071 FINANCIAL

NET SALES          No185
                 •13541.40
CASH IN DRAWER
                 •10567.99

NUMBER•10567.99
                    •0.00

CASH DECLA TOTAL
                 •10567.99
CASH DECLA SHORT•0.00
CASH DECLA OVER •0.00
CHARGE IN DRAWER
                   •102.25
CH DECLA TOTAL•102.25
CH DECLA SHORT  •0.00
CH DECLA OVER   •0.00
CHECK IN DRAWER
                  •2854.20
CHK DECLA TOTAL
                  •2854.20
CHK DECLA SHORT •0.00
CHK DECLA OVER  •0.00
CREDIT IN DRAWER
                    •10.00
CR DECLA TOTAL  •10.00
CR DECLA SHORT  •0.00
CR DECLA OVER   •0.00
FOODSTAMP IN DW •0.00
EBT IN DRAWER   •0.00
```

Open Check Report

Report Code:25



```
          X
0025 OPEN CHECK

REG 01-07-92 21:03
M. JACKSON1234    348
  3708          #000021
          •101.50

REG 01-07-92 21:24
K. SMITH  1234    355
  1005
          •100.50

REG 01-07-92 21:31
M. JACKSON1234    357
  1210
           •60.50

REG 01-07-92 21:31
K. SMITH  1234    358
  1528
           •40.50

REG 01-07-92 21:32
K. SMITH  1234    359
  1320
           •33.50

REG 01-07-92 22:37
A. MORRIS 1234    416
  1111
           •17.25
```

6

For the Manager

This section describes modes and operations that are generally used by management only. Besides user programming procedures, it also describes how to perform clerk assignments and set stock quantities.

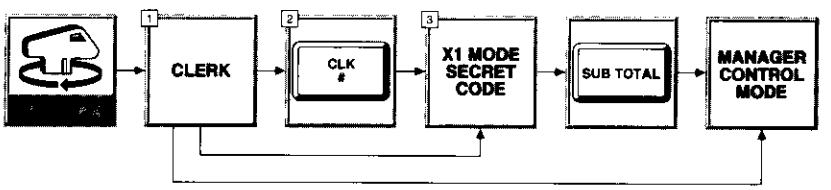
6-1 Manager Control Mode (X1 Mode)

Manager control consists of the four operations listed below. Access to these operations can be restricted by a secret password that makes it impossible to perform operations unless the correct password is input.

1. Drawer assignments for each clerk (when optional multi-drawer system is used)
2. Stock quantity maintenance
3. Program 1 programming (programming unit prices for department keys, Short PLUs, Long PLUs; programming unit prices, rates, times, dates for function keys)

Entering the Manager Control Mode

Procedure

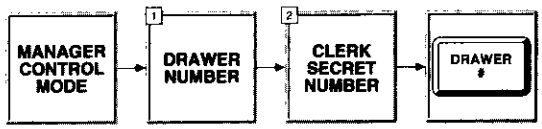


1. Press a clerk button or input a clerk secret number. If you have a secret password programmed for access to the Manager Control Mode, proceed with the following steps. The register goes directly into the Manager Control Mode at this point if you do not have a secret password programmed.
2. Press the Clerk Number key if you do not want the password you input in the next step to appear on the display as you input it.
3. Input the secret password. An error occurs if you try to enter the Manager Control Mode without inputting a password (when one is programmed), or if the password you input does not match the one programmed for the register.

To avoid repetition, the above operation is abbreviated to the following for all of the other procedures in this section.

6-2 Assigning Drawers for Each Clerk

Each clerk can be assigned a drawer when optional multi-drawer system is being used. Drawer assignments can also be made in Program 3 Mode.



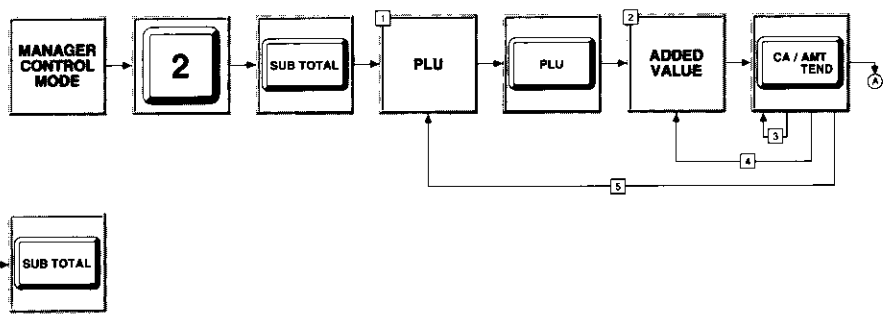
1. Input the number of the drawer you want to assign (1 to 4).
2. Input a 4-digit clerk secret number (0001 to 9999) that identifies the clerk you want to assign the drawer to. Note that you must input all four digits of this number.

6-3 Stock Quantity Maintenance (Long PLUs Only)

You can make changes in actual stock quantities for Long PLUs using the procedures described in this section.

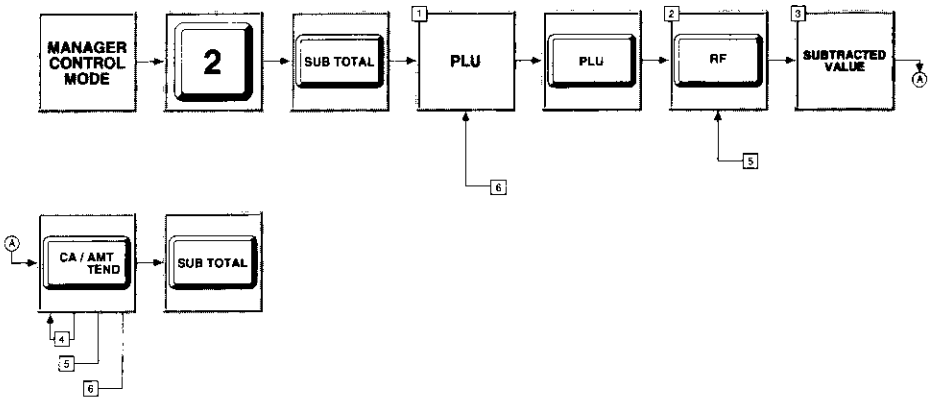
- Do not use decimal point key when inputting values in this procedure. The procedure to specify values (6-digit integers or 6-digit integers with 3-digit decimals) for actual stock quantity maintenance is explained in the Programming Manual.
- Values you specify in the operations shown in this section are either added to or subtracted from the current actual stock quantity. Do not input a new stock quantity.

To add to the actual stock quantity of a Long PLU



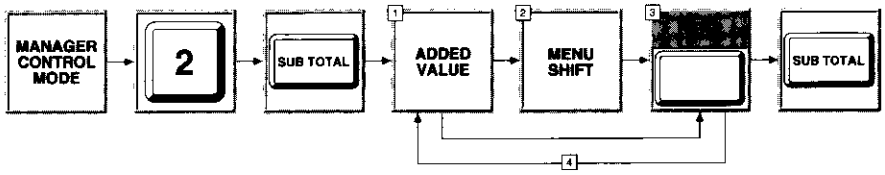
1. Input the PLU number or Random PLU code that identifies the Long PLU whose actual stock quantity you want to add to.
2. Input the value you want to add to the actual stock quantity of the Long PLU you specified above. You can input a 6-digit integer in the range of 1 to 999999 or a 9-digit fractional value in the range of 0.001 to 999999.999. The type of value you input depends on how the register is programmed.
3. Loop here if you want to add the same value to the next sequential PLU number.
4. Loop here if you want to add a different value to the next sequential PLU number.
5. Loop here if you want to specify another PLU number or Random PLU code.

To subtract from the actual stock quantity of a Long PLU



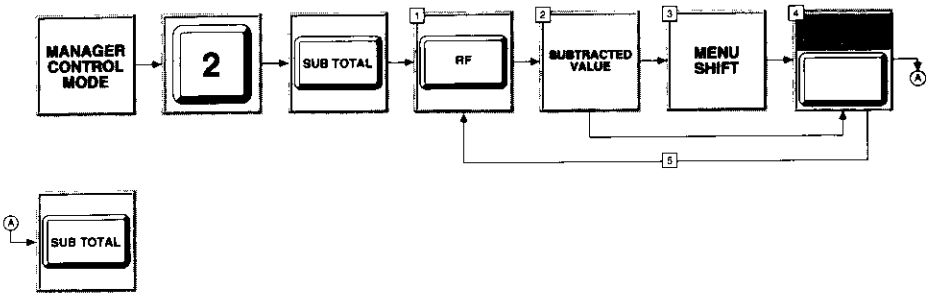
1. Input the PLU number or Random PLU code that identifies the Long PLU whose actual stock quantity you want to subtract from.
2. Press the Refund key to specify subtraction.
3. Input the value you want to subtract from the actual stock quantity of the Long PLU you specified above. You can input a 6-digit integer in the range of 1 to 999999 or a 9-digit fractional value in the range of 0.001 to 999999.999. The type of value you input depends on how the register is programmed.
4. Loop here if you want to subtract the same value from the next sequential PLU number.
5. Loop here if you want to subtract a different value from the next sequential PLU number.
6. Loop here if you want to specify another PLU number or Random PLU code.

To add to the actual stock quantity of a Flat–Long PLU



1. Input the value you want to add to the actual stock quantity of the Long PLU you specified above. You can input a 6-digit integer in the range of 1 to 999999 or a 9-digit fractional value in the range of 0.001 to 999999.999. The type of value you input depends on how the register is programmed.
2. Shift to the 1st, 2nd, or 3rd menu if necessary.
3. Press the Flat-Long PLU key whose actual stock quantity you want to add to.
4. Loop here if you want to input another value for another Flat-Long PLU.

To subtract from the actual stock quantity of a Flat–Long PLU



1. Press the Refund key to specify subtraction.
2. Input the value you want to subtract from the actual stock quantity of the Long PLU you specified above. You can input a 6-digit integer in the range of 1 to 999999 or a 9-digit fractional value in the range of 0.001 to 999999.999. The type of value you input depends on how the register is programmed.
3. Shift to the 1st, 2nd, or 3rd menu if necessary.
4. Press the Flat-Long PLU key whose actual stock quantity you want to subtract from.
5. Loop here if you want to input another value for another Flat-Long PLU.

6-4 Program 1 Programming

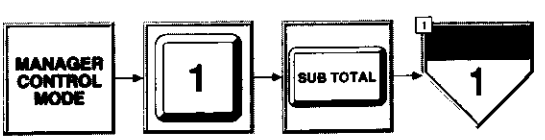
Use the Manager Control Mode to program Program 1 items. These items can be preset to prohibit programming by Manager Control Mode. The following is a list of items that you can program using the Manager Control Mode.

- Unit prices for departments, Short PLUs and Long PLUs
- Unit prices for the Plus, Minus, Coupon, and Bottle Return keys
- Percentage for the Premium/Discount key
- Rate or amount service charge for check cashing using the Check Tender key
- Rate or amount service charge for temporary finalization using the New Balance key
- Date
- Time
- Currency exchange rate for the Currency Exchange key

Change the position of mode control key to another setting (REG 1, REG 2, RF, OFF, X2, or Z2). This procedure cancels Program 1 Mode of Manager Control (X1) Mode.

Actual programming procedure is explained in the Programming Manual.

To enter the Program 1 Mode



1. The register enters the Program 1 Mode at this point. You do not need to change the Mode Control Switch to the Program position. Perform Program 1 programming as explained in the Programming Manual.

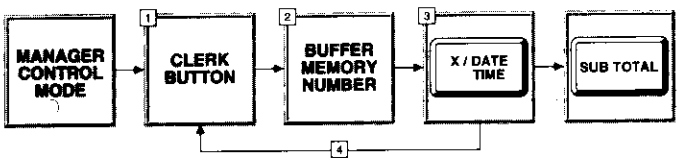
To exit the Program 1 Mode

Change the Mode Control Switch to any position other than X1.

6-5 Cashier Assignment

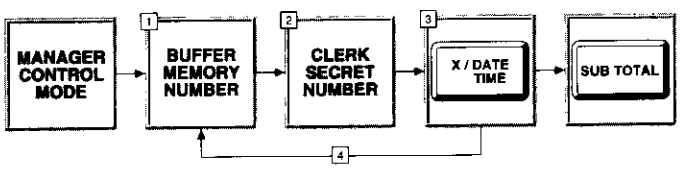
Linking a clerk to a clerk interrupt buffer enables clerk interrupt while a transaction is in progress.

To link clerk buttons to interrupt buffers



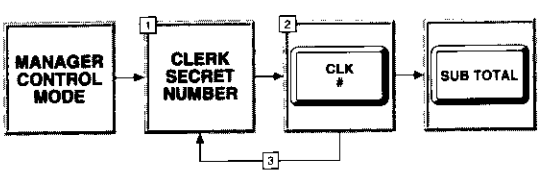
1. Press the clerk button to which you want to link the interrupt buffer.
2. Input a memory number in the range of 01 to 99. Inputting 00 here cancels the previous link.
3. You can use any of the Multiplication/For/Area/Date Time keys here.
4. Loop here if you want to specify another clerk button.

To link clerk secret numbers to interrupt buffers



1. Input a memory number in the range of 01 to 99. Inputting 00 here cancels the previous link.
2. Input the 4-digit secret number of the clerk that you want to link to the interrupt buffer.
3. You can use any of the Multiplication/For/Area/Date Time keys here.
4. Loop here if you want to specify another memory number and clerk secret number.

To link clerk secret numbers to Clerk Secret Number keys



1. Input the 4-digit secret number of the clerk that you want to link to the Clerk Secret Number key.
2. Press the Clerk Secret Number key.
3. Loop here if you want to specify another clerk secret number.

- You cannot manually input a clerk secret number for a Clerk Secret Number key that is programmed with a Clerk Secret Number.

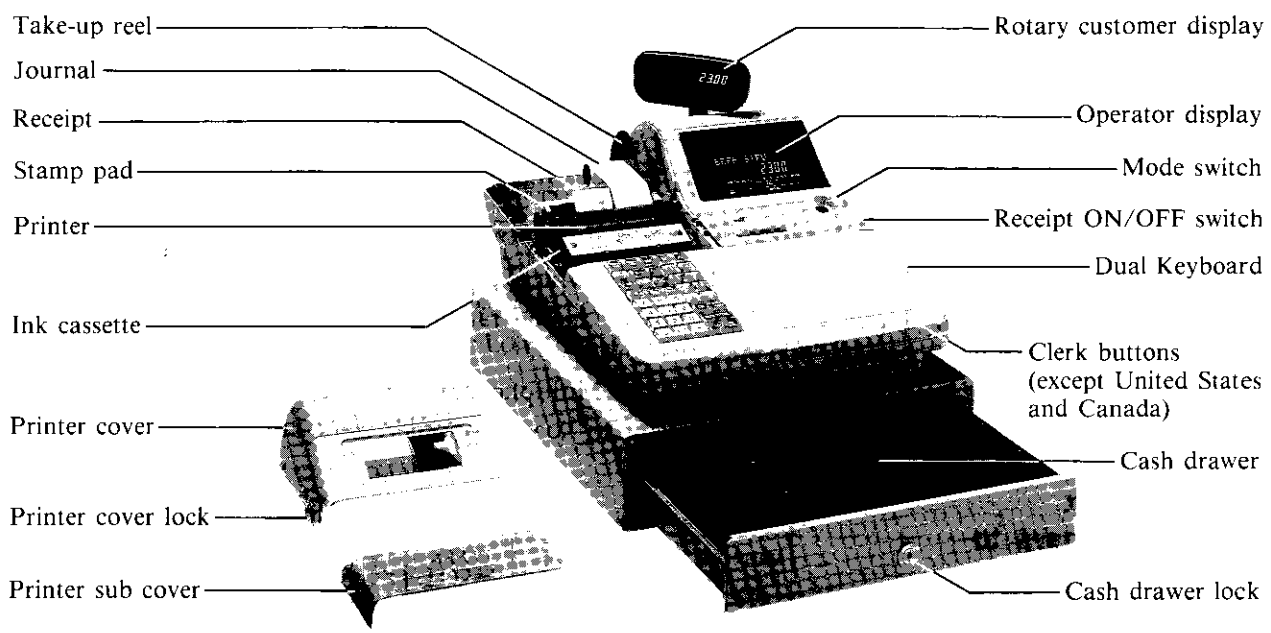
  To use more than one clerk secret number, the corresponding number of Clerk Secret Number free function keys must be reserved.

7

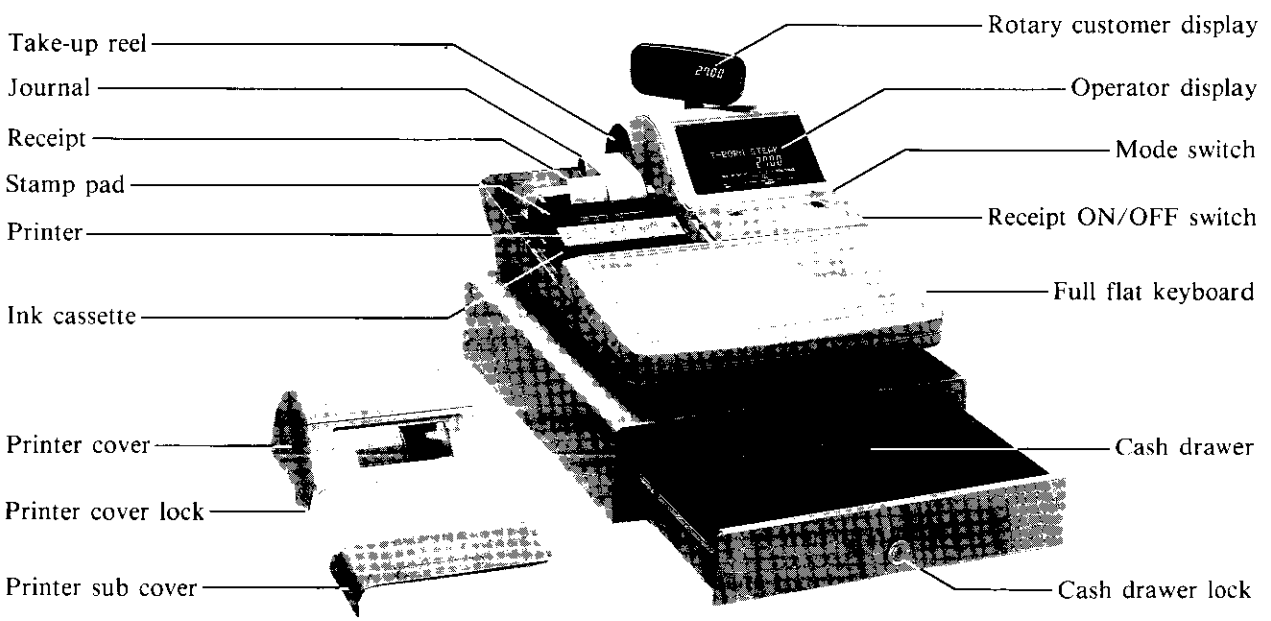
General Guide

This section identifies keys, control switches, and register displays.

TK-2300

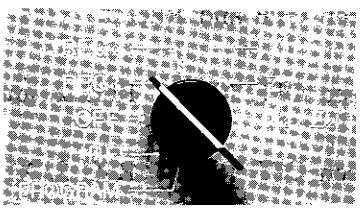


TK-2700



7-1 Mode Switch and Keys

Mode Switch



Use the Mode Switch to select the modes described below. Certain modes cannot be selected by some of the mode control keys.

- OFF (Unit Lock Mode)

  Switches power OFF. Any mode control key can be inserted and removed from the Mode Switch in this position.
- REG 1 (Register 1 Mode)

  This mode is used for normal sales transactions. Any mode key can be inserted and removed from the Mode Switch in this position.
- REG 2 (Register 2 Mode)

  Used for special operations. Since switching to the Reg 2 Mode requires a special key. Such functions as discounts, credit sales, charge sales, check payments, and paid outs can be controlled by programming them as prohibited in the Reg 1 Mode and allowed in the Reg 2 Mode.
- RF (Refund Mode/Reg Minus Mode)

  When the Mode Switch is in RF position, you can access either the Refund Mode or the Reg Minus Mode. See 28.
- X1 (Daily Sales Read Mode/Manager Control Mode)

  The Daily Sales Read Mode is used to obtain daily sales reports without resetting (clearing) all total data.

  The Manager Control Mode consists of the four operations listed below. These operations can be protected by an X1 Mode secret password which makes it impossible to perform the operations unless the correct secret code is input.

  Drawer assignments for each clerk (when optional multi-drawer system is used)

  Stock value maintenance

  Program 1 programming
- Z1 (Daily Sales Reset Mode)

  Use this mode to obtain daily sales reports while resetting (clearing) all total data.
- X2/Z2 (Periodic Sales Read/Reset Mode)

  Use this mode to obtain periodic sales reports without resetting any total data (read), or while resetting (clearing) all total data (reset). These operations can be protected by an X2/Z2 mode secret code which makes it impossible to perform the operation unless the correct secret code is input.
- Program Mode

  Use this Mode when programming functions and presetting data such as unit prices and tax rates, and when reading program data.

MODE Control Keys

Three MODE control keys (two of each) are provided with the cash register.

United States/Canada/U.K.

- OP (Operator) key
  This key switches between OFF and REG 1.
- M (Master) key
  This key switches between OFF, REG 1, REG 2, and X1.
- OW (Owner) key
  This key switches between OFF, REG 1, REG 2, X1, Z1, X2/Z2 and RF.
- PGM (Program) key
  This key switches to any Mode Switch position.

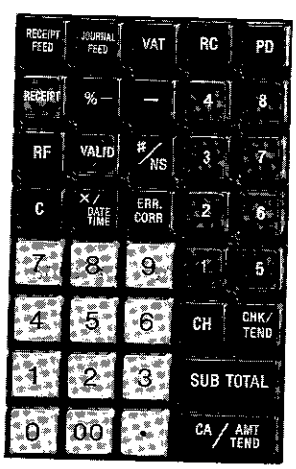
Other Areas

- OP (Operator) key
  This key switches between OFF and REG 1.
- M (Master) key
  This key switches between OFF, REG 1, REG 2, and X1.
- OW (Owner) key
  This key switches between OFF, REG 1, REG 2, X1, Z1, X2/Z2 and RF.

7-2 Keyboard and Keys

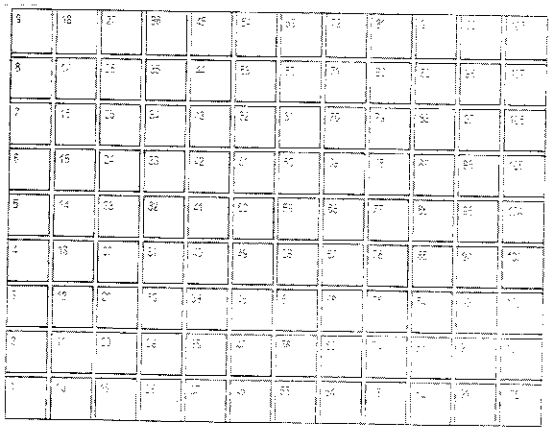
TK-2300

The following function key assignments and key layouts are standard for general purposes, and may differ from those programmed on your cash register. The programmability of each key makes it possible to tailor a keyboard to suit your particular type of business.



Micro-Touch Keyboard

The micro-touch keyboard consists of 108 Flat-PLU keys as standard. You can mark keyboard sheets either with verbal or graphic representations of menu items, and change them to correspond with menu changes throughout the business day.



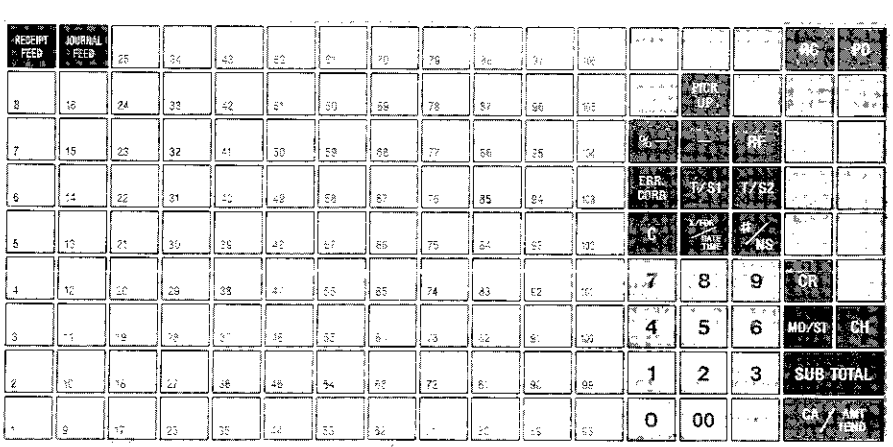
Changing Menu Sheets

1. Lift the lower edge of menu sheet rubber cover.
   Caution
   The top edge of the menu sheet rubber cover is fixed. If you lift it with too much force, it can separate from the cash register and damage the rubber.
2. Remove menu sheet and replace it with another one.
3. Replace the menu sheet rubber cover and press it firmly into place.

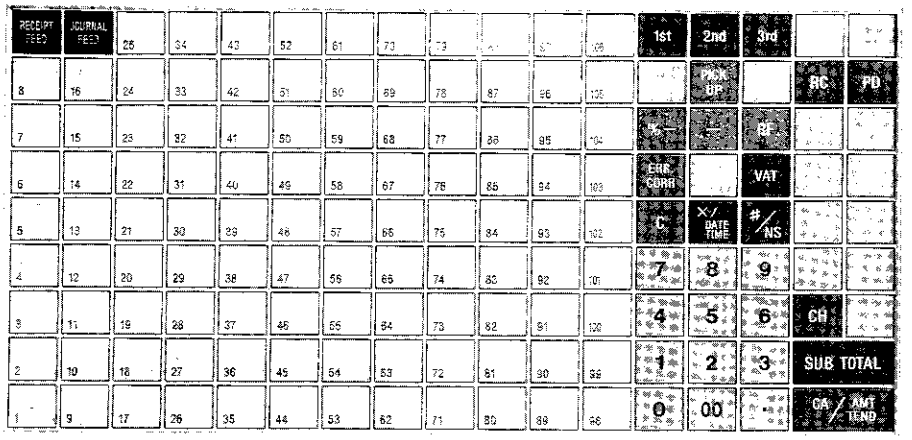
TK-2700

The full flat-keyboard consists of 106 Flat-Long keys, 8 department keys, 25 function keys, and 12 numeric keys as standard. The following key assignments and key layouts are standard for general purposes, and may differ from those programmed on your cash register. The programmability of each key makes it possible to tailor a keyboard configuration to suit your particular type of business. You can make keyboard sheets either with verbal or graphic representations of menu items, and change them to correspond with menu changes throughout the business day.

United States and Canada



Other Areas



Changing Menu Sheets

1. Lift the lower edge of menu sheet rubber cover.
   Caution
   The top edge of the menu sheet rubber cover is fixed. If you lift it with too much force, it can separate from the cash register and damage the rubber.
2. Remove menu sheet and replace it with another one.
3. Replace the menu sheet rubber cover and press it firmly into place.

Numeric Keys

[0], [1] to [9]/[00]/[000]/[0000]/[·]

- These keys are used to input amounts, quantities, customer numbers, etc.
- Maximum capacity for each data input is:
  Amount = 9999999
  Quantity = 9999.999
  Tendered amount = 9999999999
  Number = 9999999999
  Percent = 99.99

Department Keys

[DEPT 1] to [DEPT 8] (Standard)

- These keys register amounts for sales items or refund items for accumulation in department totalizers.
- Multiple registrations of the same item can be performed by repeatedly pressing the same key or using the multiplication operation.
- An amount input is not required for department keys preset with unit prices.

Flat-Long PLU Keys

[01] to [108] (TK-2300)/[01] to [106] (TK-2700)

- These keys are used for Long PLU registration.

Function Keys

Add Check Key [ADD CHECK]

- This key is used in a check tracking system to combine the details of more than one check into a single check.

Arrangement Key [ARG]

- Executes the multiple operations assigned.

Bottle Return/Linked Bottle Return Keys [BR]/[LINKED BR]

- The Bottle Return key registers a bottle return amount.
- The Linked Bottle Return key specifies next input as a linked bottle return.

Cash Amount Tendered Key [CA/AMT TEND]

- This key is used to register a cash amount due either with or without a tendered amount input. The transaction is finalized by display of change amount due when tendered amount is greater than or equal to amount due.

Charge Key [CH]

- This key registers a charge sale amount either with or without a tendered amount input.

Check Endorsement Key [CHK/EDS]

- This key prints the check endorsement on personal checks using an optional slip printer.

Check Print Key [CHECK PRINT]

- This key prints amounts, date, and message on personal checks using an optional slip printer.

Check Tender Key [CHK/TEND]

- This key registers a check payment amount either with or without a tendered amount input. The transaction is finalized by display of change amount due when tendered amount is greater than or equal to amount due.

Clear Key [C]

- This key clears erroneous input, error conditions, and stops error alarm.
- Clears date or time display mode.

Clerk Number Key [CLK #]

- This key assigns clerk secret numbers.

Coupon Key [CPN]

- This key registers coupon and accumulates the coupon amount in the coupon totalizers. The registered coupon amount is not deducted from the department, PLU or gross totalizer, but from the net totalizer only.

Coupon 2 Key [CPN 2]

- This key registers coupon and accumulates the coupon amount in the coupon 2 totalizer. The registered coupon amount is deducted from the department, PLU, gross and net totalizers.

Credit Key [CREDIT]

- This key registers a credit payment amount either with or without a tendered amount input.

Currency Exchange Key [CE]

- This key converts foreign currency to local currency or vice versa using the exchange rate preset for the key and displays the result.
- This key is used for conversions of a home currency subtotal or merchandise subtotal to the equivalent of another country's currency.
- This key is also used for conversion of another country's currency payment to the equivalent of the home currency.
- This key is used for conversions of another country's currency to the equivalent of the home currency.

Customer Key [CUSTOMER]

- This key registers the number of customers.

Deposit Key [DEPOSIT]

- This key is used when registering deposits returned to customers.

Discount Key [%−]

- This key applies a preset % or manually input % to obtain the discount amount for the last registered item or subtotal.

Discount Subtotal Key [DC/ST]

- This key displays the subtotal amount after the discount is applied during gas department registration.

Drawer Number Key [DRAWER No.]

- This key is used in the Manager Control Mode (X1) for assignment of clerks to specific drawers when optional multi-drawer system is being used.

Error Correct [ERR CORR]

- This key is used to correct the last item, discount, premium, amount tendered, etc.

Food Stamp Status Shift Key [F/S]

- This key changes food stamp status of the next item between food stamp applicable and food stamp not applicable.

Food Stamp Subtotal Key [FS/ST]

- This key obtains the food stamp applicable amount of food stamp applicable items.

Food Stamp Tender Key [FS/TEND]

- This key registers a food stamp payment amount with a tendered amount input.

Loan Key [LOAN]

- This key registers the bank in drawer.

Long Price Look Up Key [PLU]

- This key is used to register Long PLUs.
- It accesses and automatically registers preset prices and status data according to PLU number or random PLU code input.

Manual Tax Key [M-TAX]

- This key manually registers a tax amount.

Menu Shift 1 Key [1ST]

- This key shifts Flat-Long PLU key from 2nd or 3rd menu to 1st menu.

Menu Shift 2 Key [2ND]

- This key shifts Flat-Long PLU key from 1st or 3rd menu to 2nd menu.

Menu Shift 3 Key [3RD]

- This key shifts Flat-Long PLU key from 1st or 2nd menu to 3rd menu.

Merchandise Subtotal Key [MD/ST]

- This key obtains subtotal excluding the add-on tax amount and the previous balance. This function can be used to calculate a premium or discount for subtotals, or on the additional sales amount.

Minus Key [−]

- This key registers an amount for subtraction.

Multiplication/For/Area/Date Time Key [X/DATE TIME]/[X/FOR DATE TIME]/[X/XX DATE TIME]

- These keys are used to input quantities and split quantities for multiple items with the same price and department, PLU or payment media for automatic quantity extension, or length and width extension.
- They display the time or date between transactions.

New Balance Key [NB]

- This key adds latest registered total to the previous balance to obtain a new balance.

New Check Key [NEW CHECK]

- This key is used in a check tracking system to input a new check number in order to open a new check under that number.

New/Old Check Key [NEW/OLD CHECK]

- This key is used in a check tracking system to input check numbers in order to open new checks and to reopen existing checks. When the cashier inputs a check number, the register checks to see if that number already exists in check tracking memory. If there is no matching number in memory, a new check is opened under the input check number. If the check number input matches a number already stored in memory, that check is reopened for further registration or finalization.

Non-Add Non-Sale Key/Non-Add Key/Non-Sale Key

[#/NS]/[#]/[NS]

- These keys print reference numbers (personal check number, card number, etc.) during transactions (non-add).
- They open the drawer between transactions (no sale).

Old Check Key [OLD CHECK]

- This key is used in a check tracking system to input the number of an existing check (previously created using the New Check key) whose details are stored in check tracking memory. Existing checks are reopened to perform further registration or to finalize them.

Open Key [OPEN]

- This key releases maximum amount limit or low digit limit for an amount which exceeds the limit.

Open 2 Key [OPEN 2]

- This key suspends validation, check endorsement, or slip batch printing compulsory specifications.

Paid Out Key [PO]

- This key registers an amount paid out from the register.

Pick Up Key [PICK UP]

- This key registers an amount picked up from the drawer by management.

Premium Key [%+]

- This key applies a preset % or manually input % to obtain the premium amount for the last registered item or subtotal.

Previous Balance Minus Key [PB-]

- This key registers previous negative balance at the beginning of, or during a transaction.

Previous Balance Plus Key [PB+]

- This key registers previous positive balance at the beginning of, or during a transaction.

Previous Balance Subtotal Key [PB/ST]

- Pressing this key obtains the previous balance subtotal.

Price Key [PRICE]

- This key registers an amount to a sub-department when a PLU is used as a sub-department.
- Repeat operations can be performed by simply pressing this key.
- Unit prices assigned to sub-department numbers are registered by simply pressing this key. Unit prices can be manually input.

Rate Tax Key [R-TAX]

- This key activates the preset tax rate or manually input rate to obtain the tax for the preceding taxable status 1 amounts.

Receipt Key [RECEIPT]

- This key issues a receipt for the latest transaction (post-finalization receipt) when receipt switch is set to OFF or ON.

Received on Account Key [RC]

- This key registers a received on account amount.

Refund Key [RF]

- This key declares next input a return or cancels the last registered item in a transaction.

Second Unit Price Key [2nd ●]

- This key registers second unit price and quantity modifiers of Long PLUs.

Short Price Look Up Key [SHORT PLU]

- This key is used to register Short PLUs.
- Accesses and automatically registers preset prices and status data according to PLU number input.

Slip Back Feed/Release Key [SLIP BF/R]

- This key feeds a slip the specified number of lines.
- Releases slip holder when pressed without inputting number of lines.

Slip Feed/Release Key [SLIP F/R]

- This key feeds a slip the specified number of lines.
- It releases slip holder when pressed without inputting number of lines.

Slip Print Key [SLIP PRINT]

- This key starts printing on a slip of all transaction data just printed on the receipt.

Subtotal Key [SUB TOTAL]

- This key obtains subtotal including the add-on tax amount and the previous balance.

Table Number Key [TABLE NO.]

- This key is used to input table numbers.

Taxable Amount 1 Subtotal Key [TA1/ST]

- This key obtains subtotal of Taxable Status 1 taxable amounts.

Taxable Amount 2 Subtotal Key [TA2/ST]

- This key obtains subtotal of Taxable Status 2 taxable amounts.

Tax Exempt Key [TX/EX]

- Changes taxable amount subtotal to non-taxable.

Tax Status 1 Shift Key [T/S1]

- This key changes the tax status of next item from non-taxable to Taxable Status 1 or from Taxable Status 1 to non-taxable.

Tax Status 2 Shift Key [T/S2]

- This key changes the tax status of next item from non-taxable to Taxable Status 2 or from Taxable Status 2 to non-taxable.

Text Print Key [TEXT PRINT]

- This key is used to input text up to 21 characters long using Flat–Long PLU keyboard and print it on the receipt and journal.

Text Recall Key [TEXT RECALL]

- This key is used to recall programmed text messages by inputting a memory at which the text is stored. The recalled text is printed on the receipt and journal.

Tip Key [TIP]

- This key registers tips.

Tray Total Key [TRAY TOTAL]

- This key displays the total amount with the tax included for all registrations from the last registration until this key is pressed or all registrations between presses of this key.

Validation Key [VALID]

- This key validates item or transaction amounts by them them on slips.
- Validation can be made compulsory for certain function keys.
- Multiple validations can be prohibited for certain function keys.

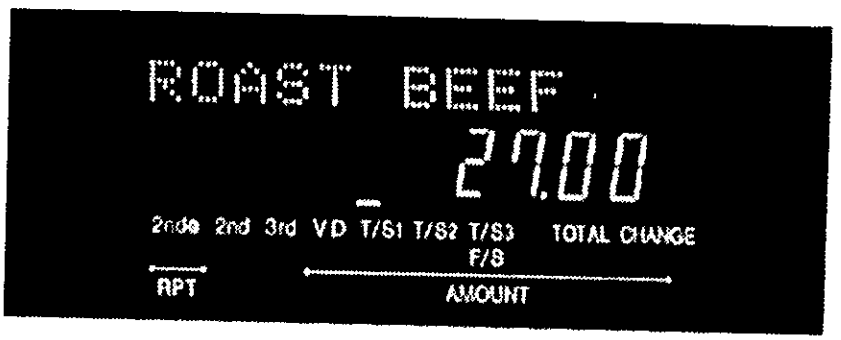
Void Key [VOID]

- This key invalidates preceding data registered for departments, PLUs or set menus only.
- This key must be pressed before the transaction involving the data to be invalidated is finalized, but is also effective even after calculation of a subtotal amount.

7-3 Displays

Operator Display

United States and Canada



Other Areas

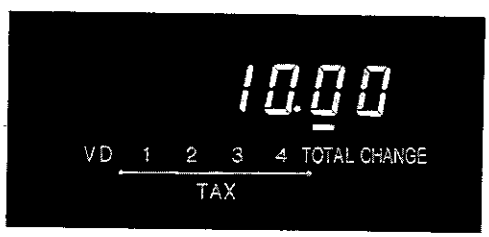
1. Alphanumeric Display
   Descriptors preset for departments, PLUs, and function keys appear on an 8-character alphanumeric display. Error messages, programming messages and specified mode descriptors also appear as prompts for the operator.
   This display shows the data (month, day and year) when the Multiplication/Date/Time Key, Area/Date/Time Key, Quantity for/Date/Time Key, or Triple Multiplication/Date/Time Key is pressed in the Reg 1, Reg 2 or RF Mode.
   Operation of the Multiplication/Date/Time Key will not display the date when the key is programmed for multiplication with the format, Unit Price × Quantity.
2. Numeric Display
   This display shows such numeric data as prices, quantities, rates, transaction total, and change amounts due up to 10 digits long, without any leading zeros.
   Shows the time (hours, minutes, seconds) in 24-hour timekeeping format when the Multiplication/Date/Time Key, Area/Date/Time Key, Quantity for/Date/Time Key, or Triple Multiplication/Date/Time key is pressed in the Reg 1, Reg 2 or RF Mode.
   Operation of the Multiplication/Date/Time Key will not display the date when the key is programmed for multiplication with the format, Unit Price × Quantity.

3. Number of Repeats Display
   This display shows the number of times that a key is pressed in succession. Only one digit is displayed, so only the units are shown when the number of repeats is greater than nine.
4. Transaction Indicators
   The following transaction indicators appear on the display to indicate the type of operation being performed.

Indicator	Meaning
REG	Mode Switch set to REG1 or REG 2
2nd	2nd menu
3rd	3rd menu
VD	Error correct or void operation
Tax Status 1 (T/S1)	Taxable Status 1 item registration or shift operation
Tax Status 2 (T/S2)	Taxable Status 2 item registration or shift operation
Tax 1	Taxable Status 1 item registration or shift operation
Tax 2	Taxable Status 2 item registration or shift operation
Tax 3	Taxable Status 3 item registration or shift operation
TOTAL	Subtotal or total
CHANGE	Change amount due

Rotary Customer Display

All information on the operator display (except for transaction indicators) also appears on the rotary customer display.



7-4 Printer

The following functions can be programmed for receipt, journal and validation printing.

- Subtotal line printed for tender operation
- Feed one line between stamp or message and headlines
- Skip item line printing (journal)
- Receipt message printing
- Suppression of consecutive number, time, date (on journal), taxable symbol, number of sales, and taxable amount when using the tax table program
- Figure partitions and decimal points
- Validation amount

Journal

The journal contains records of all registration, read, reset and program data. It is wound on a take-up reel as a permanent record, and registration items can be skipped (through programming) to conserve journal paper.
Printing of "CLEAR" can be programmed when the Clear key is operated in the Reg 1, Reg 2 and RF Modes. The number of Clear key operations can also be programmed for printing on the Fixed Totalizer and Clerk Accountability Read/Reset Reports.

Receipts

A receipt is issued at the end of each transaction when the receipt switch is set to ON. Reports are issued on receipt paper during read and reset operations.

U.S. and Canada

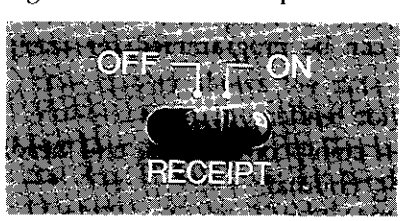
```
YOUR RECEIPT
Thank you
Call again

COMMERCIAL MESSAGE 1
COMMERCIAL MESSAGE 2
COMMERCIAL MESSAGE 3
COMMERCIAL MESSAGE 4
REG 07-01-92 10:19
K. SMITH  1234      34

DEPARTMENT 1    T
                $10.00
   5 ITEMS   @ 1.10
PLU  1    T     $5.50
PLU  2    T     $1.20
SUBTOTAL
                $16.70
10%
DISCOUNT-       -1.67
          7NO
TAXABLE AMOUNT 1
                $15.03
TAX  1          $0.75
SUBTOTAL
          $15.78
CHECK           $15.00
CASH            $0.78

BOTTOM MESSAGE 1
BOTTOM MESSAGE 2
BOTTOM MESSAGE 3
BOTTOM MESSAGE 4
```

Other Areas

```
YOUR RECEIPT
Thank you
Call again

COMMERCIAL MESSAGE 1
COMMERCIAL MESSAGE 2
COMMERCIAL MESSAGE 3
COMMERCIAL MESSAGE 4
REG 01-07-92 10:00
A. MORRIS 1234      21

DEPARTMENT 1    *10.00
   5 ITEMS
PLU  1           *5.50
PLU  2           *1.20
SUBTOTAL
                *16.70
10%
DISCOUNT-       *1.67
          7NO
SUBTOTAL
          *15.03
CHECK           *15.00
CASH            *0.03

BOTTOM MESSAGE 1
BOTTOM MESSAGE 2
BOTTOM MESSAGE 3
BOTTOM MESSAGE 4
```

Receipt ON/OFF Switch

Use the receipt ON/OFF switch in Reg 1, Reg 2 and RF Modes to control issuance of receipts. In other modes, receipts or reports are printed, regardless of the receipt switch setting.



A post-finalization receipt can still be issued when the ON/OFF switch is set to OFF. The cash register can also be programmed to issue a post-finalization receipt even when the ON/OFF switch is set to ON.

Post-Finalization Receipts

A post-finalization receipt is a receipt that is issued after finalization of the registration. If you are using the cash register with the receipt ON/OFF switch set to OFF and the customer demands a receipt after the registration is finalized, you can issue a post-finalization receipt by pressing the Receipt key. You can program the cash register to issue one of two types of post-finalization receipts.

- Post-finalization receipt with headlines and total amount only
- Post-finalization receipt with headlines and detailed items

Total Amount Only

```
RECEIPT MESSAGE 1
RECEIPT MESSAGE 2
RECEIPT MESSAGE 3
RECEIPT MESSAGE 4

COMMERCIAL MESSAGE 1
COMMERCIAL MESSAGE 2
COMMERCIAL MESSAGE 3
COMMERCIAL MESSAGE 4
REG 01-07-92 22:05
A. MORRIS 1234     376
          1

CASH          12.30

BOTTOM MESSAGE 1
BOTTOM MESSAGE 2
BOTTOM MESSAGE 3
BOTTOM MESSAGE 4
```

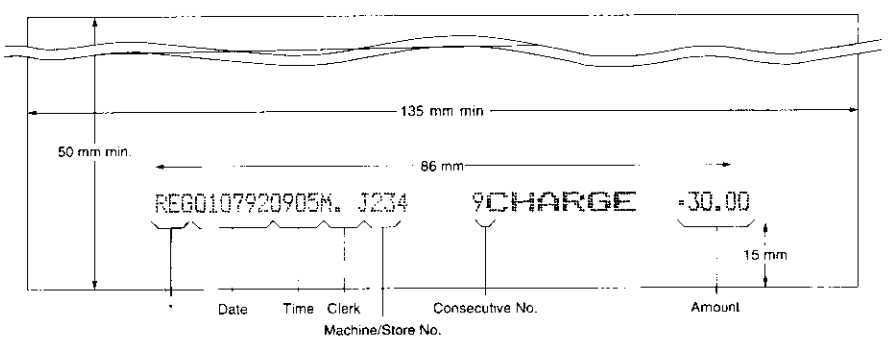
Detailed

```
RECEIPT MESSAGE 1
RECEIPT MESSAGE 2
RECEIPT MESSAGE 3
RECEIPT MESSAGE 4

COMMERCIAL MESSAGE 1
COMMERCIAL MESSAGE 2
COMMERCIAL MESSAGE 3
COMMERCIAL MESSAGE 4
REG 01-07-92 22:10
A. MORRIS 1234     380
          1

DEPARTMENT 1      3.00
DEPARTMENT 1      3.00
DEPARTMENT 1      3.00
PLU 1             1.10
PLU 1             1.10
PLU 1             1.10
          6NO
CASH          12.30

BOTTOM MESSAGE 1
BOTTOM MESSAGE 2
BOTTOM MESSAGE 3
BOTTOM MESSAGE 4
```

Post-finalization receipts cannot be issued for registration finalized using the Received On Account , Paid Out, Non-Sale, Loan, Pick Up, or Non-Add Non-Sale key, or for registrations using the Error Correct/Cancel key. Post-finalization receipts can, however, be issued for transactions in which you have input a reference number using the Non-Add Non-Sale key.

Validation

Perform validation for item, subtotal, or total amounts by inserting a slip into the validation slot. You can print up to four copies per validation slip.



Item Validation

You can perform validation printing for the following operations by pressing the Validation key after the operation is performed. You will be able to continue registration for the current transaction following validation printing. Department, Flat-Long PLU, Long PLU, Short PLU, Plus , Minus, Discount, Premium, Refund, Bottle Return, Cancel, Void, partial tender using Cash Amount Tendered, Charge, Credit, Food Stamp Tender, or Check Tender key

Subtotal Validation

You can perform validation printing during a transaction by pressing the Validation key after pressing the Subtotal key or Merchandise Subtotal key. You will be able to continue registration for the current transaction following validation printing.

Total Amount Validation

You can perform validation printing for the total amount following Received On Account or Paid Out registration, or Cash Amount Tendered, Charge, Check Tender, Food Stamp Tender, or Credit key finalization by pressing the Validation key after finalization.

The descriptors and amounts indicated in the chart shown below are printed on the validation slip for total validation at finalization or during partial tender.

	Validation Slip Programming*			
	Print subtotal amount on validation slip		Print tendered amount on validation slip	
Finalization Method	Descriptor	Amount	Descriptor	Amount
Without amount tendered	Finalize key	Subtotal	Finalize key	Subtotal
Tender	Finalize key	Subtotal	Finalize key	Tender amount
Partial tender	Finalize key	Tender amount	Finalize key	Tender amount
Without amount tendered following partial tender	Finalize key	Subtotal following partial tender	Finalize key	Subtotal following partial tender
Tender following partial tender	Finalize key	Subtotal following partial tender	Finalize key	Tender following partial tender

Paper Feed Keys

Use the Receipt Feed key to feed receipt paper when loading a new roll.

Use the Journal Feed key to feed journal paper when loading a new roll or when checking records.

Printer Key

The printer key locks and unlocks the printer cover.

Caring for the Printer

Printing of dates, unit prices, and amounts is performed using the printer ink ribbon cassette. A stamp pad is used for printing of the store name, etc. Printing can be kept clear by replacing the ink ribbon cassette when necessary, and by adding one or two drops of ink to the stamp pad. Open the printer cover using the printer cover key, and proceed as noted below.

Stamp Ink Replenishment

1. Tear the receipt paper between the paper roll and paper inlet.
2. Remove stamp pad from its holder by lifting at the center of the roller.
3. Feed one or two drops of ink into the holes on the back of the stamp pad (Fig. 7-1)

   Be sure to use only CASIO SUPER INK K. Chemical reaction caused by using other types of ink can damage the stamp pad.
4. Replace the stamp pad in its holder
5. Feed the paper through the printer.

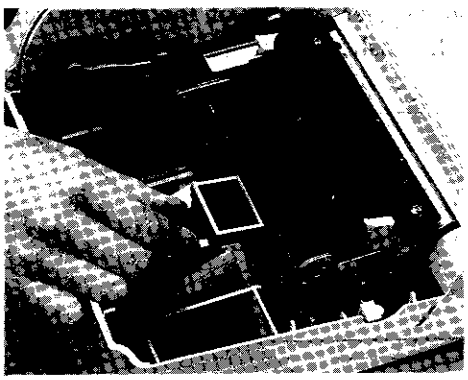


Fig 7-1.

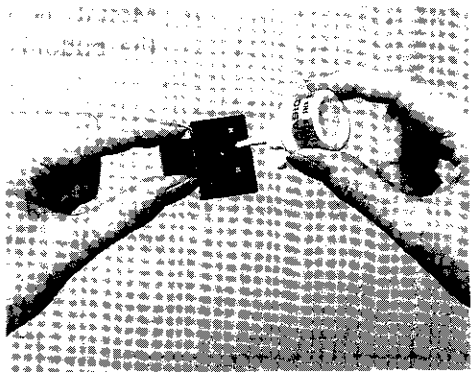


Fig 7-2.

Replacing the Ink Ribbon Cassette

1. Remove printer sub-cover.
2. Remove used ink ribbon cassette from its holder by pulling toward the keyboard (Fig. 7-3).

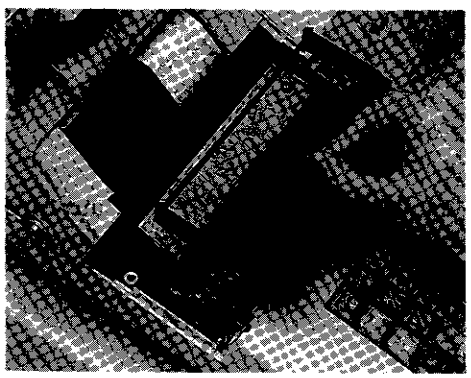


Fig 7-3.

3. Position the new ink ribbon cassette so that its projections are aligned with the holes of the base plate and press toward the printer until it locks.
   Use only ERC-32C ribbon cassettes. Other types of cassettes can damage the printer.
4. Tighten the ink ribbon by turning knob on the cassette two or three turns.

- Never attempt to replenish the ribbon using stamp ink. Doing so can damage the printer.
- After completing these procedures, replace the receipt paper.

7-5 Cash Drawer

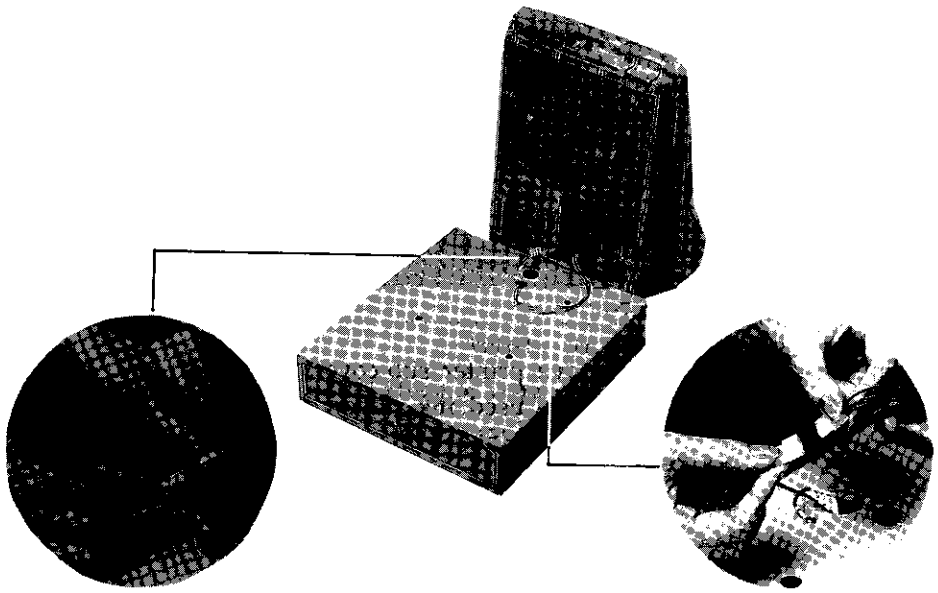
The cash drawer opens automatically when a normal transaction is finalized, or when the Non-Sale Key or Non-Add Non-Sale key is pressed. The cash drawer key locks and unlocks the cash drawer, but you should empty the cash drawer at the end of each business day.
When you are using a DL-3611/2737 type drawer, you can program a Drawer Open Alarm function to sound an alarm if the drawer is left open. The Drawer Open Alarm continues to sound and you will not be able to perform any operation until the drawer is shut (Reg 1, Reg 2, RF Modes).

Connecting the drawer

The cash register and drawer are packed separately.

1. Connect drawer connector (three-color lead on drawer) to the cash register.
2. Connect frame drawer connector (green lead on drawer) to the cash register.

3. Mount the cash register on top of the drawer, ensuring that the feet on the bottom of the cash register go into the holes on the drawer.



When you are using the compulsory drawer, any operation other than those listed below results in an error if the drawer is open. This is true in Reg 1, Reg 2 and RF Modes.

- [C] key operation
- [VALID] key operation
- [CHK/EDS] key operation
- [RECEIPT] key operation
- [PICK UP] key operation
- [SLIP PRINT] key operation
- [SLIP F/R] key operation (Release operation only)
- [SLIP RF/R] key operation (Release operation only)
- [LOAN] key operation

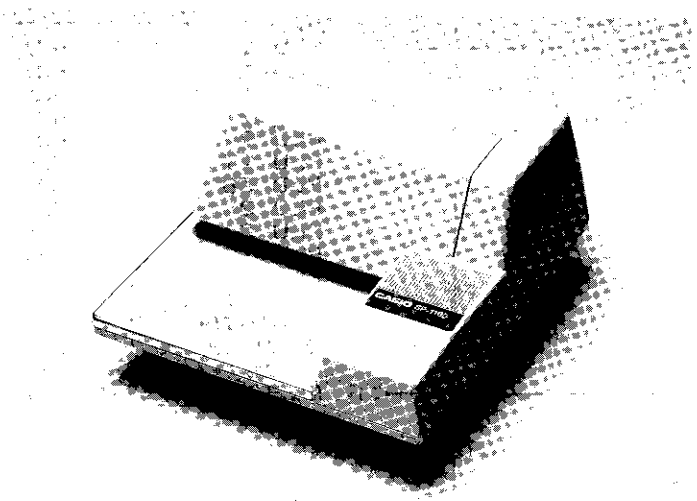
The register can also be programmed to prohibit numeric input if the drawer is open.

8

Slip Printer

The cash register can be connected to an optional SP-1100 Slip Printer for printing of guest checks, check endorsements, etc.

8-1 SP-1100 Slip Printer (Option)



The SP-1100 is a low-noise, 32-character-per-line dot matrix slip printer. Its compact design requires very little space. Print speed is 2.1 lines per second, and an original plus a maximum of two copies can be obtained using carbonless paper.

The SP-1100 features an automatic feed function and automatic back feed function. Total amount validations and endorsements for personal checks can also be printed using the SP-1100.

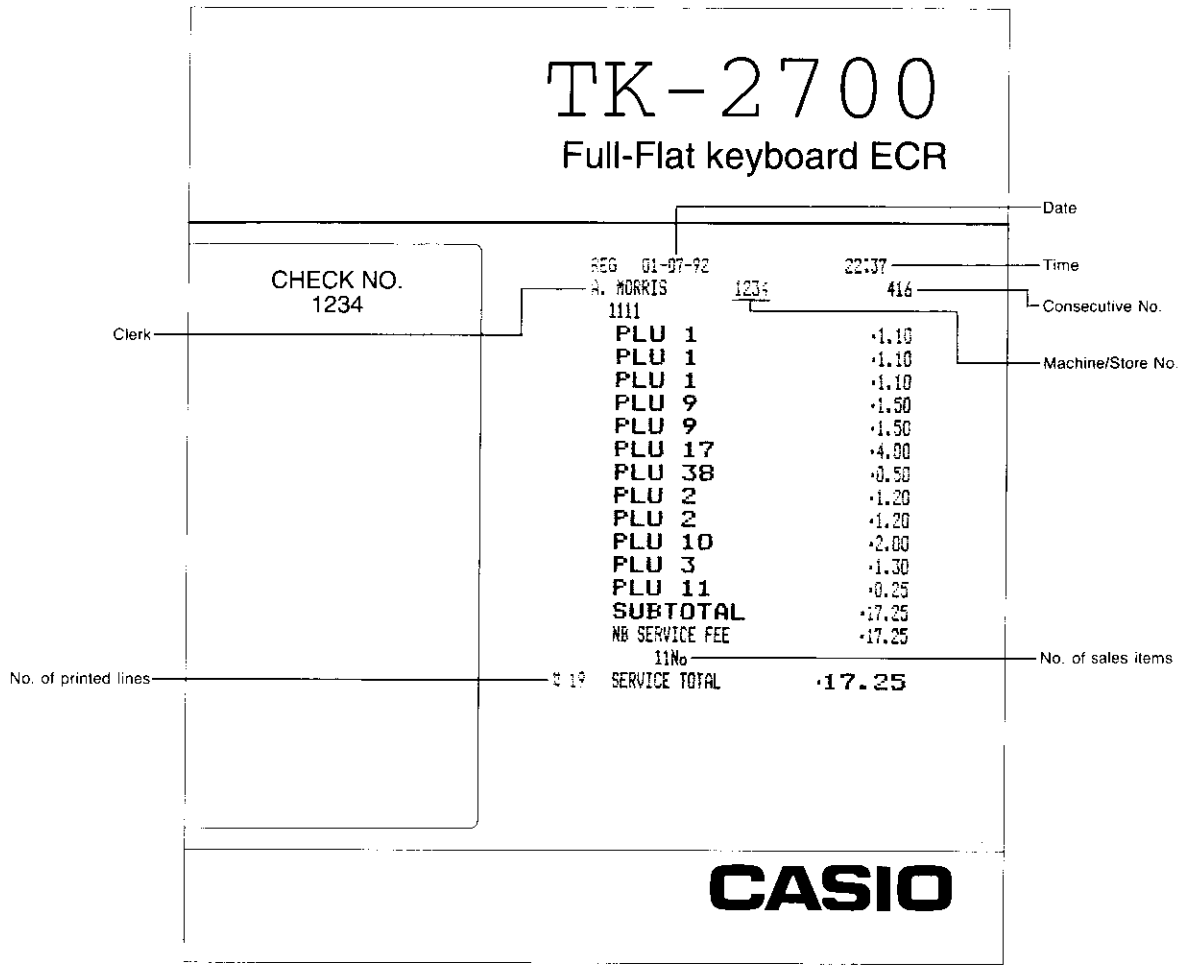
Programmability

The following functions can be programmed for slip printing.

- Slip buffer memory capacity (number of units reserved by memory allocation
- Slip buffer memory check
- Automatic back feed following slip alternate printing or slip batch printing
- Automatic back feed following slip validation printing
- Automatic back feed following check endorsement printing
- Alternate printing or batch printing for slip printing
- Slip print operation compulsory
- Slip paper set into slip printer compulsory before beginning registration
- Number of lines for slip automatic feed function

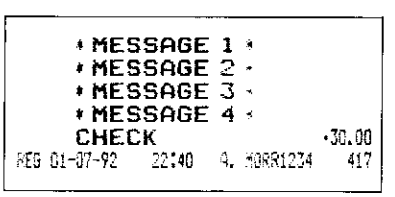
Guest Checks

Registration details (details printed on journal) can also be printed on a guest check.



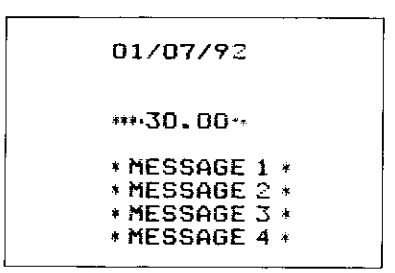
Personal Check Endorsement

Up to four lines of 21 characters per line can be preset for printing on the slip.



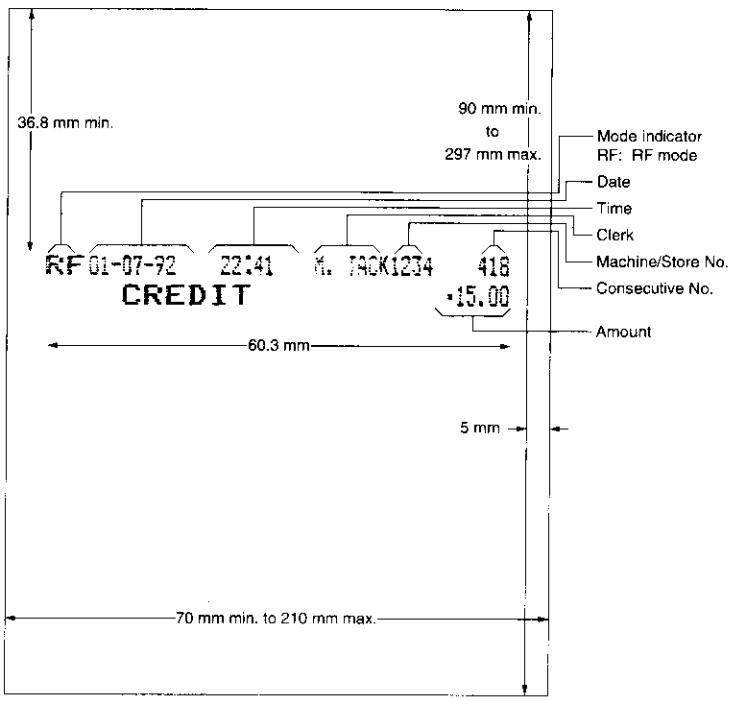
Check Print

Up to 9 lines can be used for the amount, date, and check print message programmed for printing on slips.



Slip Printer Validation

If slip paper is inserted in the slip printer, printing of total amount validation will be performed by the slip printer only. Validation printing will not be performed on a slip inserted in the validation slot of the register if a slip is in the printer. Also note that item validation printing and subtotal validation printing cannot be performed using the slip printer.



9 Troubleshooting

Check these items if the cash register does not work properly.

- Is the power cord plugged in correctly?
- Is the wall outlet in good condition?
- Is the Mode Switch in the correct position?
- Has the position of the Mode Switch been changed during registration? *Setting the Mode Switch to RF or PROGRAM while registration is in progress will cause an error alarm to sound. Return to the previous mode and press the Cash Amount Tendered key to finalize the original transaction before changing the Mode Switch setting.*
- Did you perform compulsory operation?
- Review the procedures shown in this manual to ensure proper operation.
- Contact your dealer if you continue to have trouble.

10

Error Messages

Error messages appear on the display whenever a problem occurs.

Error Messages	Meaning	Action
PASSWORD	Operation without inputting PROGRAM, X1, or X2/Z2 mode secret code (PASSWORD)	Input secret code (PASSWORD)
ERR CLK#	Registration without inputting clerk secret number.	Input secret number
START	Incorrect initialization or unit lock clear operation.	Perform initialization or unit lock clear operation again.
ERR MODE	Mode Switch position changed before finalization.	Return Mode Switch to original setting and finalize operation.
ERR CLERK	Clerk button pressed before finalization of a registration being performed under another clerk button.	Press the original clerk button and finalize the registration before pressing another clerk button.
RECEIPT SW	Receipt ON/OFF button setting changed before finalization under another setting.	Return receipt ON/OFF switch to its original setting and finalize registration.
ERR CUST	Registration without inputting number of customers.*	Input number of customers.
ERR TAX	Finalization of a transaction attempted without registration of the tax.*	Register the tax.
ERR ST	Registration without confirmation of subtotal.*	Press the Subtotal key.
ERR FSST	Food Stamp Tender key pressed without first pressing Food Stamp Status.	Press the Food Stamp Status key.
RF MODE	Two consecutive transactions attempted in refund mode.*	Switch to another mode and then back to RF mode for the next transaction.
ERR TABLE#	Attempt made to register an item without inputting a table number.*	Input a table number.
VALIDATION	Validation not performed.*	Perform validation operation.
DECLARE	Read/reset operation without declaration of money in drawer.*	Perform money declaration.
ERR CHECK#	Attempt made to register an item without inputting a check number.*	Input a check number.
GUEST RCT	Attempt made to finalize a transaction without issuing a guest receipt.*	Input a check number.
MEMORY FULL	Check tracking memory full.	Finalize and close the check number currently being used.
DRAWER	Registration while cash register drawer is open.	Shut drawer before registration (when optional compulsory drawer is used).
CHANGE OVER	Change amount exceeds preset limit.*	Re-input amount tendered.
INDW OVER	Contents of drawer exceed programmed limit (sentinel function).*	Arrange to have contents of drawer picked up by management.
OCCUPIED	Attempt made to use the New Check key to open a new check using a number that is already used for an existing check in check tracking memory.	Finalize and close the check that is currently under the number that you want to use or use a different check number.
SLIP	Slip printing not performed.*	Perform slip printing operation.
NOT FOUND	Attempt made to use the Old Check key to reopen a new check using a number that is not used for an existing check in check tracking memory.	Use the correct check number (if you want to reopen a check that already exists in check tracking memory) or use the New Check key to open a new check.
MIN.STOCK	Actual stock quantity less than or equal to minimum stock quantity.*	Perform stock maintenance.
- STOCK	Negative value for actual stock quantity.*	Perform stock maintenance.

Error Messages	Meaning	Action
CHK ENDORSE	Check endorsement printing not performed.*	Perform check endorsement printing operation.
TENDER	Finalize operation attempted without inputting amount tendered.*	Input amount tendered.
MEMORY OVER	Memory allocation exceeds total cash register RAM capacity.	Reallocate without exceeding RAM capacity.
HOLD	Clerk changed without pressing New Balance key during clerk interrupt.	Press New Balance key before changing clerk.

* These errors only occur when certain functions are programmed as compulsory or prohibited.

11

Memory Protection Battery

Totalized sales and other items are protected during power failures by a built-in memory protection battery. If the power goes out during a read or reset operation, data can be reprinted from the beginning by pressing the Cash Amount Tendered key when power is restored. The memory protection battery is constantly charging and discharging as you switch the cash register on and off during normal operations. This causes battery capacity to decrease after approximately two years of use.

Remember...a weak battery can result in the loss of valuable transaction data. A label on the back of the cash register shows the normal service period of the battery installed in you cash register. Have the battery replaced by your dealer within the period noted on this label.

ptions

The options can be used for additional efficiency.

Item	Model	Specifications
RAM chips*	RAM-410 RAM-420	• For memory expansion • 32 Kbytes
	RAM-530	• For memory expansion • 128 Kbytes
Slip printer	SP-1100	• Dot matrix printer • 32 characters/line, 2.1lps • Compact design • Low-noise • Back feed function
Interface board	I/O-PB-9	• For In-line system • For On-line system • For electronic scale connection • For centronics printer connection
Power protection battery	B-6	• For operation during power failures
Wetproof cover	WT-62 (TK-2700) WT-60 (TK-2300) WT-61 (TK-2300)	• Protects keyboard
Program loader	DF-2	• For saving program data onto a floppy disk • For loading program data to cash register
Connector cable for DF-2	PRL-CB-1*	• For connecting the cash register to a DF-s Data Recorder
Connector cable for electronic scale	SCL-CB-10 *	• For connecting the cash register to an electronic scale
Connector cable for centronics printer	PRT-CB-4*	• For connecting the cash register to a Centronics printer

* For connection, be sure to use only the cables specified for these options.

Note

Applicability of options differs according to region (country).

13

Specifications

Keyboard	TK-2300: stroke and micro touch system
	TK-2700: full micro touch system
	10-key system; 8-key buffer memory (2-key rollover)
Display	Digitron (operator display/rotary customer display)
	12-column alphanumeric display; 10-digit numeric display (zero suppression); number of repeats; transaction indicator
Receipt Printer	12-column dot matrix alphanumeric system
	Receipt on/off switch
	20 (H) × 30 (W) mm stamp printed automatically
Journal Printer	21-column dot matrix alphanumeric system
	Automatic take up roll winding
Validation Printer	42 digits; one line; 135 mm (minimum) wide slip
Paper Roll	45 (W) × 83 (dia.) mm
Paper Feed	Separate for receipts and journal
Print Speed	2.8 lines/second
Memory Protection Battery	24-hour full charge protects memory for approximately 30 days. Battery should be replaced every two years.
Power Supply/Consumption	See the rating plate on the right side of the cash register.
Operating Temperature	0°C to 40°C (32°F to 104°F)
Humidity	10 to 90%
TK-2300 Dimensions/Weight	366 (H) × 458 (D) × 410 (W) mm/13.8 kg with DL-2338 drawer 378 (H) × 473 (D) × 460 (W) mm /17.1 kg with DL-3610 drawer 359.6 (H) × 463 (D) × 400 (W) mm /13.2 kg with other drawer
TK-2700 Dimensions/Weight	359.6 (H) × 463 (D) × 400 (W) mm /13 kg with DL-2737 drawer 378 (H) × 473 (D) × 460 (W) mm /16.9 kg with DL-3611 drawer

GUIDELINES LAID DOWN BY FCC RULES FOR USE OF THE UNIT IN THE U.S.A. (Not applicable to other areas)

WARNING: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This equipment complies with the requirements in CISPR Publication 14.

CASIO

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SA9504-A
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TK-2300 (OP) * E